

CRIMINAL JUSTICE AND SUICIDE OUTCOMES IN INDIANA'S EXPERIENCE WITH A RISK-BASED GUN SEIZURE LAW

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ABSTRACT

This article examines the application and effectiveness of a 2006 Indiana law designed to prevent gun violence by authorizing police officers to separate firearms from persons who present imminent or future risk of injury to self or others, or display a propensity for violent or emotionally unstable conduct. A court hearing is later held to determine ongoing risk in these cases; a judge decides whether to return the seized firearms or retain them for up to 5 years. The study examines the frequency of criminal arrest as well as suicide outcomes for 395 gun-removal actions in Indiana. Fourteen individuals (3.5%) eventually died from suicide, 7 (1.8%) using a firearm. The study population's annualized suicide rate was about 31 times higher than that of the general adult population in Indiana, demonstrating that the law is being applied to a population at genuinely high risk. By extrapolating information on the case fatality rate for different methods of suicide, the researchers calculated that 1 life was saved for every 10 gun-removal actions, confirming a previous study's results in Connecticut. Key stakeholders' perspectives from open-ended interviews regarding the law's function are also presented along with implications for gun policy reform and implementation.

Gun violence prevention advocates in the United States have focused much attention on point-of-sale background checks as a key to preventing risky individuals from accessing firearms.¹ However, many people who pose a high risk of harming others or themselves have no gun-disqualifying record under current laws and would pass a background check. Many others at risk are legally disqualified but still obtain firearms in private transactions that avoid a background check. Extreme Risk Protection Orders (ERPOs) could help overcome some of the shortcomings of background checks in keeping guns out of the wrong hands.² ERPO laws authorize local police with a civil court order to temporarily remove firearms from people who demonstrate a high risk of inflicting harm to self or others. Thirteen states—California,³ Connecticut,⁴ Delaware,⁵ Florida,⁶ Illinois,⁷ Indiana,⁸ Maryland,⁹ Massachusetts,¹⁰ New Jersey,¹¹ Oregon,¹² Rhode Island,¹³ Vermont,¹⁴ and Washington.¹⁵—and the District of Columbia¹⁶ have enacted laws that authorize risk-based, time-limited gun removal through a civil court procedure. Several other states are considering bills with similar provisions. There is limited research on how ERPOS work in different jurisdictions and whether they save lives. This article extends the evidence from our recent evaluation of Connecticut’s risk-warrant law to examine the implementation and effectiveness of a similar regime in Indiana, the second state to enact such a law in the United States.

Our previous study in Connecticut, a record-based follow-up analysis of 762 gun-removal cases, found evidence that the law was effective in preventing suicides; we estimated that for every 10 to 20 gun-removal actions, 1 life was saved.¹⁷ Another research group recently reported results of a quasi-experimental study of state population-level death rates suggesting that gun-removal laws in both Connecticut and Indiana have reduced suicide and

homicide rates in those states.¹⁸ Parker's earlier study described certain aspects of the population subjected to gun seizure in Marion County, Indiana, but did not examine subsequent violence-related outcomes.¹⁹ The current study adds to this literature by examining arrest and criminal conviction as well as suicide outcomes, at the individual level, in the Indiana gun seizure population.

By design, risk-based gun removal is a public health intervention and not a criminal justice action; a court's decision to retain a person's firearms is made in a civil proceeding and is not intended to be criminalizing. Thus, an important empirical question in evaluating these laws is whether gun seizure in practice is associated with criminal arrest, either in conjunction with the confiscation incident itself, or by selectively targeting people whose risky behavior makes them more likely to be involved with the criminal justice system. A second question is whether, and to what extent, people whose guns are removed under the aegis of such laws avoid future criminal activity involving guns and are prevented from gun suicide. We take up these questions.

In what follows, we analyze patterns in matched arrest and death records for 395 gun-seizure subjects in Indiana to build further evidence regarding the implementation and effectiveness of risk-based firearm-removal policies. Comparing the year before and after gun seizure, we determine what proportion of subjects were arrested and convicted for crimes committed with and without guns; the frequency of arrest in conjunction with the gun seizure event itself, and whether these arrests resulted in conviction; and how many of these individuals eventually died of suicide, using which methods, and how many more might have died had their guns not been removed. In general, we examine how the law has worked, and

how well, in a state with fewer gun control laws and far more guns and gun deaths than Connecticut.^{20,21} Beyond the quantitative empirical analysis, we explore barriers and challenges to implementing the law and its perceived fairness and success in open-ended narrative interviews with key stakeholders and actors in Indiana's gun removal process.

RESEARCH METHODS AND DATA SOURCES

The study combined descriptive statistics, a quasi-experimental analysis, and informal qualitative research methods to evaluate Indiana's risk-based firearm removal law. IRB approval was obtained from Indiana University and Duke University. Researchers assembled and coded a cross-agency administrative record database on all individuals with gun seizure cases (N=395) that were processed in Marion County, which subsumes the city of Indianapolis (2010 Census population 903,393), from 2006 to 2013. For seven individuals with more than one gun-removal event, only the first instance was included in the dataset. Personal descriptors and event-related information in court documents were linked to statewide records of arrest and criminal conviction pertaining to the same individuals during the year before and after gun removal. Death records, including cause of death, were also matched for decedents in the study through 2017.

Variables included: demographic characteristics (age, sex, race), police-reported circumstances leading to firearm seizure (suicidal or homicidal ideation, domestic disturbance, mental health or other cognitive dysfunction, substance abuse), other police action at the time (arrest, transport to hospital emergency department), number of firearms seized, length of time between seizure and resolution of the case, outcome of court proceedings, and criminal charges associated with arrests and convictions during the year before and after gun removal.

When more than one criminal charge resulted from a single arrest, the most serious offense was attributed to that arrest, along with firearm involvement if noted. Crimes were categorized according to the FBI's two-tier Uniform Crime Reporting (UCR) system. UCR Tier 1 crimes include criminal homicide, forcible rape, robbery, aggravated assault, burglary, larceny, motor vehicle theft, and arson. Tier 2 crimes include other (less serious) assaults, forgery and counterfeiting, fraud, embezzlement, stolen property (buying, receiving, possessing), vandalism, weapons (carrying, possessing), prostitution and commercialized vice, other sex offenses, drug abuse violations, gambling, offenses against the family and children, driving under the influence, liquor laws, drunkenness, disorderly conduct, vagrancy and loitering. Two investigators (KAH, CMB) independently categorized the crimes into UCR tiers and reconciled any discrepancies. Regarding death records, variables included the date of death, whether the death was a suicide and, if so, the method of suicide.

Standard descriptive and associational statistics (means, percentages, Chi-square tests with p-values) were used to summarize patterns in the arrest and criminal conviction data. To evaluate the law's effectiveness in preventing suicides, we used known case-fatality rates associated with alternative methods of suicide to estimate the number of suicide attempts and the additional number of fatalities that would have been expected in the study population if guns had not been removed.

For the interview component of the study, an expert panel of researchers identified key topical areas related to different stakeholders' involvement with the law, their beliefs and attitudes regarding the law's rationale, its purpose and effectiveness, and perceived barriers and facilitators of implementation. Researchers developed a semi-structured interview guide

based on these areas for discussion. One of the co-investigators, a forensic psychiatrist (GFP), conducted the open-ended interviews with key stakeholders in Marion County. Participants included two police officers who oversaw gun seizure cases, two judges who conducted hearings and rendered decisions on whether to retain or return seized firearms, and a prosecutor assigned to present these cases. The interviewees were selected based on their experiences with the law's implementation and using the network contacts of the Indiana based co-investigator (GFP). The interviews were audio-recorded and transcribed. Quotations were selected to illuminate the potential benefits as well as practical challenges encountered in implementing Indiana's gun seizure law from the subjective perspectives of key actors who were involved in the legal process. In this paper, we refer to the five people we interviewed as "informants" or "interviewees" and to individuals whose guns were seized as "subjects" or "respondents."

QUANTITATIVE ANALYSIS RESULTS

Statistical description of gun seizure respondents and events

From 2006-2013, the Indiana statute was applied to remove firearms from 395 individuals in Marion County. Table 1 describes the demographic characteristics of individuals whose firearms were removed, the frequency of documented reasons for removal, number of firearms removed, and actions taken by police regarding transport and arrest of the individual. The majority of cases involved white men with suicidal ideation where police removed more than one firearm and transported the individual involuntarily to a hospital for evaluation without an arrest.

[Table 1 here]

Despite the statutory guideline that an initial hearing be held within 14 days of gun seizure, convening parties often encountered delays. On average, 287 days elapsed from the date of gun seizure to the date of a court decision regarding the disposition of seized firearms. More than half of the subjects (53.2%) failed to appear at the scheduled court hearing. More than a quarter of cases (28.9%) were dismissed following a court hearing and the guns were returned to the owner. Guns were retained by court order in 62.5% of cases and 2.0% of respondents voluntarily surrendered their guns. In 5.8% of cases, guns were transferred to a family member or associate of the owner. About 1 in 10 gun-seizure respondents (8.9%) agreed to have police destroy their guns.

Outcomes of follow-up court hearings were available for 108 cases. These hearings were held to consider whether to return guns to the owner in cases where guns had been retained, or to retain guns in cases where the respondent had failed to appear at the initial hearing. In 69.4% of these follow-up hearings, respondents failed to appear, which resulted in their guns being destroyed. Guns were returned in 5.6% of the 108 cases, and returned to a designated third party (e.g., a family member) in 2.8% of these cases. A quarter of the 108 cases (25.9%) were dismissed. Seven individuals were the subject of more than one gun-seizure.

Criminal arrest and conviction patterns

A match to state arrest records revealed that about 1 in 4 (25.1%, n=99) of the gun seizure respondents were arrested at least once during the two-year study period, including 32 individuals (8.1%) who were arrested twice or more. During the year after gun removal, 15

individuals (3.6%) were arrested for a crime classified as Tier 1 by the FBI's Uniform Crime Report System; 7 (1.8%) were convicted. Eight subjects (2.0%) were arrested for a gun-related charge during the year after removal, and 2 (0.5%) were convicted. Of those arrested at any time, 89.9% (n=89) were male. As a group, arrestees were significantly younger at the time of gun confiscation than those who were not arrested (37.0 vs. 44.7, $p < 0.001$).

Among the 99 arrested individuals, most (63.6%, n=63) were subsequently convicted. Of the 63 who were convicted, 9 (14.3%) were charged with a Tier 1 offense. Most of the convicted group (73.0%, n=46) had convictions resulting from arrests only during or after the gun seizure event. Convicted respondents had a mean age of 35.6 years at the time of gun seizure, and most (88.9%, n=56) were male.

Reasons for initial gun seizure differed between those who had an arrest during the study window and those who did not. Comparing those with any arrest to those with no arrest, homicidal ideation was more often noted as the reason for gun seizure (33.3% vs. 16.9%) and suicidal ideation was less often noted (55.6% vs. 72.3%), as displayed in Table 2.

[Table 2 here]

Slightly more individuals experienced an arrest in the year following the gun seizure than in the year preceding the gun seizure (14.7% vs. 9.6%). Twenty respondents (5.1%) were matched with an official arrest record occurring in the immediate period surrounding the gun seizure event, from 4 days before to 4 days following gun seizure. This is somewhat less than the number of respondents (n=32) that the police reported arresting in connection with the gun seizure action at the time. The difference would be accounted for if a few of the individuals that

the police transported to a hospital were initially reported as being arrested, but criminal charges were not filed.

Fourteen individuals (3.5%) were charged with offenses involving firearms at some time during the study window, for a total of 16 gun-related charges, as represented in Table 3. Thirteen of those charged with gun crimes were male, and their average age was 38.4 years. Handguns were seized from 12 (85.7%) of these individuals. Homicidal ideation was the most common reason for gun removal in these cases (57.1%, n=8), followed by suicidal ideation, domestic violence, and mental or cognitive problems. Of the 14 people charged with firearm offenses, 5 (35.7%) were convicted, one for an arrest that occurred prior to the seizure. Two of the convictions were for pointing a firearm, two for carrying a handgun without a license, and one for hunting on private land without consent of the landowner.

[Table 3 here]

Suicide Outcomes in Indiana's Gun Seizure Population

Eleven individuals in the study died from suicide after the gun removal event, according to death records obtained from the Indiana Department of Health. Unlike analysis of other outcomes in this study, analysis of death following gun removal included all years since the gun removal policy began through December, 2017, and was not limited to the single year following a given gun removal event. Additionally, 3 decedents whose cause of death was listed as "drug overdose" had made documented suicide threats and engaged in suicidal behavior around the time of gun removal. Based on this additional information about suicidality obtained from the

gun seizure records, these 3 self-injury deaths were counted suicides for our analysis, for a total of 14 (3.5%).

All but one of the 14 individuals who died of suicide were white males. Their ages ranged from 22 to 74 years, with an average of 43.2 years. U.S. military veterans were over-represented; 4 (28.6%) of the suicide decedents were veterans, compared to 9.5% of the Indiana adult population, according to the US Census and US Department of Veterans Affairs.

The study population's suicide rate was 421 per 100,000 per year, averaged over the period from the date of gun removal to the date of death or study end. This rate is approximately 31 times higher than the average age-adjusted suicide rate in the general adult population of Indiana during the same period, and 15 times higher than the suicide rate for adult males in the state during this time.¹

Seven of the 14 suicides were carried out with firearms, 4 by drug overdose, and 3 by hanging. The proportion of these suicides that involved guns was lower than the corresponding proportion for men in the general population of Indiana (50% vs. 58%, respectively), and substantially lower than would have been expected in a population of gun owners (65% or higher).¹⁷ However, it is notable that 3 individuals obtained access to another firearm within 12 months after the gun seizure and died by suicide with a firearm. One of these gun deaths occurred just one day after firearm removal; the others occurred 36 and 103 days after gun removal.

An average of three firearms per individual were seized from subjects who eventually died of suicide; handguns were removed in 11 of the 14 cases. The court had retained the seized firearms at the hearing in 10 of the 14 cases. In two cases in which the court had not retained the firearms, the individuals who got their guns back later used a firearm in suicide. The period of time between the date of gun removal and the date of death by suicide was approximately eight months longer for those who used guns than for those who used other means (average 40 vs. 32 months).

We followed the approach described by Swanson and colleagues¹⁷ to estimate that the study population had made approximately 131 (largely nonfatal) suicide attempts by differing means over an average of 36 months following gun seizure. In a counterfactual scenario in which no firearms would have been removed from any of these individuals, and assuming that this study population of gun owners would have been as likely as other male gun owners to use a gun in any suicide attempt, we calculated that an additional 39 suicide deaths would have occurred over the study period. Dividing the total population of gun seizure cases by this estimated number of averted suicides yields 1 life saved for every 10.1 gun-removal actions.

INTERVIEWS OF POLICE AND LEGAL ACTORS

Five in-depth interviews were conducted with key informants, who were knowledgeable individuals having different roles and perspectives regarding the gun seizure law. Informants included a prosecutor with extensive experience representing the state in gun seizure cases, two judges who adjudicated many of these cases in initial and follow-up hearings, and two police officers with experience in carrying out gun removal actions. In what follows, we present

interview excerpts that are illustrative of these legal professionals' and law enforcement officers' perceptions of implementation, effectiveness, and fairness of the law.

Implementation of the gun seizure law

Enacting a preemptive gun seizure law was controversial in Indiana, a state where hunting and gun collecting are valued traditions, gun rights are cherished, and "gun control" tends to be viewed with suspicion. According to the prosecutor:

Most people have a very definite opinion about their right to bear arms and, as a kid growing up on a farm where we hunted and target-shot and everything else, I kind of get that.

Initially, some legal professionals were skeptical about the law, while others were supportive, according to one of the interviewees. A judge stated that his fellow judicial officers "were very surprised [this law] was found to be Constitutional." But the prosecutor believed that most prosecutors, especially those with long experience, were in favor of risk-based preemptive gun seizure to ensure public safety:

I think there was some mixed feeling about it, but I think a lot of prosecutors—a lot of what I call the old-timers, the ones that had been around a long time and had seen a lot of things happen—they applauded it.

Attitudes among police officers also varied. According to one of the judges, many officers disapproved of the law's potential "overreaches ... [and] the idea of firearm seizure." However, a police officer stated that his fellow officers "all like" the law, mainly because it is the police

whose lives are often on the line in cases involving risky people with guns. In this officer's opinion, older officers supported the law from the outset, due to having witnessed gun violence involving people who were known to pose a high risk.

The informants were asked to describe some of the challenges to implementing the gun removal law once it had been enacted. The prosecutor described the early roll-out of the law as "pretty rocky," because the law was unprecedented:

[T]here was nothing [like it], no precedent for it, and so working out...the procedure of officers getting information and getting it into the courts to be able to get the guns...was our biggest issue.

All interviewees stated that more specific policies and procedures, including training for the police, should have been developed prior to implementation. The prosecutor made the point directly:

Pass the law, okay. Then the first thing they need to do is sit down with [those] involved—the courts, law enforcement, the prosecutors, and the defense—and work out a procedure for moving these cases through the courts effectively so that they can flush out some of the issues that might come up, ahead of time.... The second is education, especially with police officers, about what they are going to need to know and do when they respond [to a gun seizure call].

Perceived effectiveness of the gun seizure law

Despite the “pretty rocky” start and initial uncertainty about the process of preemptive gun seizure, all informants noted that, after the law went into effect, prosecutors and police eventually worked together to ensure legal enforcement and the advancement of strong cases that would hold up in a hearing. Still, it often fell to police officers in the field to improvise and work out the complex logistics of the process, including protocols for documentation, safe removal of firearms from respondents’ homes, warehousing the firearms, and returning guns to respondents. A police officer described what eventually became routine police practice in gun seizures involving individuals who appear to be mentally ill or emotionally unstable:

[W]hat the uniformed officers will do is place the person under an immediate detention and transport them to the nearest hospital. If it’s a veteran, they try to get them in the VA or the nearest hospital to the location where the person lives.... [The officers] will collect any firearms on the scene.... [G]enerally, the person will tell them, “This was the gun I was going to use,” or a family member will say, you know, “That’s what he had in his hand when I called you.” The officers will take it. Generally, they ask, “Are there any other firearms in the home?” And the person will [say], “Yeah, I’ve got a, you know, shotgun in my closet” – that sort of thing. They try to collect all the firearms that are in the home, and they go into the property room [while] the person [is] placed under immediate detention ... and the petition is presented to the prosecutor’s office.

The officer went on to describe a process that was developed in which the documentation supporting multiple cases of gun seizures are batched and processed together by single

individuals with different roles (i.e., screening, presentation in court, adjudication) in order to maximize efficiency and consistency.

[A] lot of times we find several other incidents and we put them all together in a packet [where we list] probable cause [and] all of the specific firearms that we want to keep and we take—we have one screener who looks at all those cases and one prosecutor who takes them before the judge. So, try to get consistency that way because one person is making the decisions [about] what's going to go here and one person is deciding, you know, who they need to ask to come in and what to give to the judge, so, try to keep as small as possible the subjectiveness into them by having one person do this and one do that.

Informants characterized the most common scenarios resulting in gun removal to involve suicide risk and serious mental illness. Both police officers described the most common scenario in similar terms: a concerned citizen calls police about a family member who is threatening or contemplating suicide and has a gun. One of the judges also cited suicide risk as the major concern in many gun seizure cases but added that psychosis was also important.

Most of it's this depression and, and suicide threat but then the others that I've seen are, in my humble opinion, seriously affected by mental illness... they're very paranoid Some are psychotic, I mean, they're actively, in the courtroom, displaying very strange behavior.

The prosecutor stated that the two most common scenarios involved people with “mental health conditions” and people threatening domestic violence.

When asked whether they think the law has been effective, both judges suggested that the law’s potential benefit has been hampered by its limited implementation, mainly because key legal actors in the process (police, prosecutors, public defenders, and judges) have little awareness of the law.

I think most people are not really aware of it...even judges.... There’s only one court in the thirty-six courts that deals with these [cases], and I don’t know how many are presented to the court right now.... So I don’t think many judges—or anyone else, for that matter—knows much about the law.

I have a feeling it’s probably not used enough, maybe because police officers don’t realize it [exists]... I think [the prosecutors] figured it was so much of a non-entity they weren’t very worried about it... and I think the public defender’s office, they took more of a back seat than they did for a regular case.

On whether gun seizure is fair

Apart from the question of whether removing guns from putatively risky people is an effective policy, an important question of ethics and law is whether it is fair. The answer involves balancing the risk of harm that might occur if guns are not removed from a person, against the potential infringement of the individual’s Constitutional right to gun ownership if guns are removed without good cause.

When asked whether the gun seizure law is “fair,” one judge who supported the law responded, “I don’t know that this particular [law] is about fairness. I think this is about safety.” The judge’s statement appears to assume that public safety can take priority over ensuring fairness to an individual. This could imply the view that perceived “unfairness” to a few individuals might be an acceptable social cost for a policy that could protect many others.

A more equivocal opinion was expressed by one of the police officers. He suggested that judgements of “fairness” are a matter of perspective and of whose interests are being considered: “If you’re looking at protecting society, yes [the law is fair]. If you’re the person looking at having your gun seized, then probably no.... [I]t depends on your perspective.”

The prosecutor answered the question about fairness in a third way, by focusing on the limits that the law places on the reach and duration of gun seizures; the requirement that police officers have strong evidence of dangerousness; and the legal due-process features that are built into the gun removal procedure as authorized in the statute:

There are checks...within that statute that don’t allow the state unfettered access to people’s homes for [gun removal] ... [N]obody just comes in and takes [the guns]. There has to be a basis for thinking that that individual has a weapon...and could present a danger to other people... Part of the reason for [the police] setting up this history of going back to the same address a lot...is establishing that there is a basis for getting the weapons in the first place. But once the weapon is taken, it’s not like anybody is being denied a particular right that they believe they have, because the state is also restricted in how long they can hold [the gun]—and if they think they need it longer, they have to

present an argument for why.... So, yeah, I think it's fair. I think it's a balanced law and I think it's been used pretty wisely.

Some individuals in these cases voluntarily agreed to give up their guns, and mental health information was sought and considered in judicial decisions about whether to return the guns.

A judge related such a case:

So a street officer went there, got ahold of the supervisor, and the individual voluntarily gave up his guns. So typically when that happens you have to put [the guns] in the property room and you mark "return to claimant" so they have to come get their guns. They e-mailed me the next day. I arranged for a mental health professional to do a home visit. Based on what she sent me back, I got ahold of [a sergeant] to say "Hey, I don't think he should get his guns back. Can you start [the process under the gun seizure law]?"

A police officer also explained the role of liaison with the mental health system in facilitating appropriate intervention in the case of mentally ill gun seizure respondents, particularly those who may not yet be experiencing a dangerous mental health crisis but could benefit from treatment to prevent such a crisis from occurring.

I get the phone call on the borderline ones ... that they're not ready to be immediately detained, [but] "Can we do some follow-up? What do you think?" And I've asked officers to do this, so I can try and get someone there, or get them into an appointment before they're in crisis. That's our goal at the moment...We have a mental health person

in the East district and we're talking about hiring two more. So we should be doing a lot more home visits, at least my unit. I mean we weren't tasked with it originally, but we do it anyway.

An important goal of the gun seizure action, according to this officer, is to use it as an opportunity to identify individuals in crisis who need mental health treatment, and to provide access to treatment. Doing this effectively, however, may require additional resources for the police and the public mental health system.

DISCUSSION

An important rationale for risk-based gun removal laws is that there are certain individuals who temporarily pose an elevated risk of violence or self-harm, but who are not otherwise prohibited from purchasing and possessing firearms by a prior criminal record; they would likely pass a background check to buy a gun from a licensed dealer. Whether the law in Indiana appropriately targeted such individuals is an empirical question, to be answered in part by examining the criminal records and death records of those who were subjected to gun seizure. What was their recent arrest and conviction history, and did it change following the gun seizure intervention? Did they have a lower chance of dying by suicide following gun removal?

With respect to these questions, Indiana's experience with its risk-based firearm removal law is of particular interest in comparison to that of Connecticut, which has been described in our previous study.¹⁷ Parker¹⁹ has previously described the operation of the Indiana firearm removal law. The two states differ markedly in several ways relevant to firearms policy: Indiana has a more conservative state legislature, fewer gun control laws, more gun-owning

households, and more gun deaths in proportion to its population than Connecticut. Yet in both states, gun removal laws emerged as a crisis-driven legislative action in response to a critical incident—a highly publicized gun homicide that threatened public safety (see Refs. 17 and 19 for descriptions of those tragedies). And in both states, as the laws have been implemented, their most common use has been in cases of suicidality, at the initiation of concerned family members.

The profile of persons typically subjected to risk-based gun seizure is quite similar in both states: gun-owning men in their middle years, who experience an emotional crisis, contemplate suicide, and make someone who is close to them aware of their intent. Matched death records revealed a suicide rate in the study population 31 times higher than that of the general adult population of Indiana during the same period; the comparable risk ratio in Connecticut was 40. Also consistent with our Connecticut study's findings, the Indiana data show that for every 10 gun-seizure actions, approximately 1 life was saved through an averted suicide.

One notable difference is that the Indiana gun seizure respondents were more likely to be arrested during the 2-year period surrounding the gun removal event than the risk-warrant subjects in Connecticut (25% vs. 12%). However, this difference appears to be due mainly to the fact that the Indiana data contained all arrests, whereas the Connecticut study only reported on arrests leading to conviction. When the two groups are compared solely on convictions, the results are more similar—16% in Indiana vs. 12% in Connecticut.

There are different ways of looking at the arrest prevalence data from the Indiana gun seizure cases. On the one hand, a substantial majority (about 3 out of 4) of these individuals

were never arrested, which is consistent with the idea that the policy provides a non-criminalizing public safety intervention in cases where law-abiding gun owners experience a dangerous psychological crisis. On the other hand, 1 in 4 were arrested within a two-year period surrounding gun seizure, and this is a rate much higher than that of the general population of adults in Indiana.

It is also of interest that only about 1% of these individuals were arrested for a gun-related charge in connection with the gun seizure event itself, and only about 0.5% were convicted on such a charge. This suggests that gun removal under the statute is appropriately being carried out as a civil legal matter, not a criminal matter. The evidence is insufficient, however, to show whether the gun seizure reduced the likelihood of gun-related crimes in the coming year than in the previous year.

The qualitative material extracted from interviews with stakeholders in the gun seizure process paints a mixed picture of tempered enthusiasm for the law. Most of those interviewed found some fault with the law, such as the fact that gun seizure under the statute does not confer a prohibition on purchasing a new gun. And almost everyone reported thinking the law should have had a better roll-out initially, with proper orientation and formal procedures in place for police officers, prosecutors, and judges, so that the various participants in the process could have been better prepared to assume their respective roles to ensure the law's timely use, effectiveness, and fairness. That uncertainty and necessity, however, also produced on-the-ground innovation. For example, legal actors developed an efficient process where groups

of gun seizure cases could be bundled together and screened, presented in court, and adjudicated at the same time.

The key informants generally considered Indiana's gun removal process to be fair. Still, the fact that a statewide law was apparently only being implemented in one county and in one particular (criminal) court could raise larger questions about equity. It should be noted that Indiana's gun removal process is enabled by a statute that does not require police to obtain a warrant in advance of the gun seizure action in situations where there is imminent danger. The batch-processing of gun removal cases would not have been feasible under the strictures of an advance-risk-warrant type of law such as Connecticut enacted. But what the process gains in efficiency for the police and legal system, it could lose in terms of timely compliance with the statutory guideline of holding a hearing within two weeks following any gun seizure action. Batching cases together for processing meant holding some cases for a long enough period to allow the cases to accumulate. The study found that on average, 287 days elapsed from the date of gun seizure to the date of a court decision regarding the return or retention of seized firearms; the statutory guideline is 14 days.

LIMITATIONS

The analysis is limited by the relatively small size of the population of gun seizure cases in Indiana (N=395), as well as missing information on the outcome of court hearings, which was available on less than half of the cases (n=108). The interview results are limited also by the small number of key informants (n=5) and the fact that they may not have been representative of the range of beliefs, opinion, and perspectives among legal actors in the gun seizure process

in Indiana; for this reason, we present the interview material as illustrative of selected knowledgeable individuals' views, not necessarily representative of the population of social actors in gun seizure in Indiana.

The analysis of the law's effectiveness based on the suicide outcome data is also limited, insofar as it depends on an extrapolated estimate of the number of attempted suicides, rather than a direct empirical assessment of suicide attempts. Moreover, the "counterfactual" analysis had a shortcoming that could possibly have resulted in an underestimate of the number of averted suicides. Specifically, our estimate assumes that gun removal works mainly by shifting the distribution of methods among suicide attempters towards more survivable means of suicide than a firearm. However, it is possible that gun removal prevented some suicides by preventing an attempt altogether. For example, this could have occurred if gun removal resulted in a referral to mental health treatment. We have no information to estimate how many non-attempters (people in the study population who never attempted suicide by any means) might have died of suicide with a gun if their guns had not been taken away or might have used some other means if they had not been referred to treatment as an indirect benefit of the gun removal event. If there were a fair number of such (unobservable) events, this could translate into a larger population-level effect.

CONCLUSION

Significantly reducing gun violence in America is a complex policy puzzle with many pieces, including: developing sharper risk-correlated criteria for denying gun purchases, strengthening the enforcement of illegal gun trafficking laws, eliminating some of the important social and

psychological determinants of violent behavior and self-harm, and fostering a culture of gun safety. One promising puzzle piece is an innovative state law, presently enacted in 13 states and the District of Columbia and under consideration in several more, that allows family members and law enforcement officers to set in motion a legal process whereby firearms can be removed from people who pose a high risk of violent behavior or suicide, even if they have not committed a crime, and to have the police hold the firearms for up to 5 years under the authority of a non-criminalizing civil court order. Challenges remain for advocates who would wish to see preemptive risk-based gun removal laws broadly enacted and implemented; these legal tools have yet to fulfill their potential in helping to reduce the toll of gun violence in America. The evidence to date from Connecticut and Indiana's experiences with such laws suggests that these challenges can be met, and that there is ample common ground upon which responsible gun owners and non-gun-owners could stand together in considering and studying such laws in other states.

TABLES

Table 1. Characteristics of firearm seizure cases in Indiana (N=395)

Characteristic	Number, unless otherwise indicated	(Percent, unless otherwise indicated)
Gender		
Male	318	(80.5)
Female	77	(19.5)
Age in years	Mean=42.8	(Range: 17-86)
Race/ethnicity		
White	301	(76.2)
Other	94	(23.8)
Reason for gun seizure (not mutually exclusive)		
Suicidal ideation	269	(68.1)
Homicidal ideation	83	(21.0)
Domestic disturbance	112	(28.4)
Acute mental illness, cognitive impairment	67	(17.0)
Drug or alcohol intoxication	104	(26.3)
Other	14	(3.5)
Number of firearms removed per case	Mean=2.7	(Range: 1-82)
Number of firearms removed, by type		
Handguns	548	(50.8)
Long guns or not described	531	(49.2)
Total	1,079	(100.0)
Action taken by police at the scene of firearm removal		
<u>Not arrested</u>		
Transported involuntarily to a hospital for evaluation	273	(69.1)
Transported voluntarily to a hospital for evaluation	38	(9.6)
Not transported to a hospital or arrested	52	(13.2)
<u>Arrested</u>		
Transported involuntarily to a hospital for evaluation, and arrested	19	(4.8)
Arrested at the scene of gun removal and transported to jail	13	(3.3)

Table 2. Documented reason for gun risk concern among gun seizure respondents who were arrested and not arrested at the time of gun seizure, the year before, or the year after (n=395)

	NOT ARRESTED (n=296)		ARRESTED (n=99)		Statistical significance
	Number	(Percent)	Number	(Percent)	
Suicidal ideation (n=269)	214	(72.3)	55	(55.6)	**
Homicidal ideation (n=83)	50	(16.9)	33	(33.3)	**
Domestic violence (n=112)	78	(26.4)	34	(34.3)	
Substance involvement (n=104)	76	(25.7)	28	(28.3)	
Mental/cognitive health (n=67)	52	(17.6)	15	(15.2)	
Other (n=14)	14	(4.7)	6	(6.1)	

Statistical significance: ** p<0.01

Sum of columns exceeds 100% because more than one reason may be noted.

Table 3. Arrests and convictions at the time of gun seizure, the year before, or the year after: severity of and gun involvement in most serious charge (n=395).

	UCR TIER 1: INDEX CRIMES ¹		UCR TIER 2: OTHER CRIMES ²		NON-GUN CHARGE		GUN CHARGE		ANY ARREST	
	N	(Percent)	N	(Percent)	N	(Percent)	N	(Percent)	N	(Percent)
<u>ARRESTED</u>										
No	367	(92.9)	309	(78.2)	314	(79.5)	381	(96.5)	296	(74.9)
At seizure ³	7	(1.8)	13	(3.3)	15	(3.8)	5	(1.3)	20	(5.1)
Year before	7	(1.8)	33	(8.4)	35	(8.9)	3	(0.8)	38	(9.6)
Year after	15	(3.8)	49	(12.4)	51	(12.9)	8	(2.0)	58	(14.7)
<u>CONVICTED</u>										
No	386	(97.7)	336	(85.1)	345	(87.3)	390	(98.7)	332	(84.1)
At seizure ⁴	2	(0.5)	9	(2.3)	9	(2.3)	2	(0.5)	11	(2.8)
Year before	0	(0.0)	20	(5.1)	19	(4.8)	1	(0.3)	20	(5.1)
Year after	7	(1.8)	32	(8.1)	34	(8.6)	2	(0.5)	36	(9.1)

Note: Sum of columns exceeds 100% because people may have been arrested before, during, and after gun seizure.

¹ FBI Uniform Crime Report (UCR) index crimes: criminal homicide, forcible rape, robbery, aggravated assault, burglary, larceny, motor vehicle theft, arson

² FBI Uniform Crime Report other: other assaults (simple, non-aggravated), forgery and counterfeiting, fraud, embezzlement, stolen property offenses (buying, receiving, possessing), vandalism, weapons violations (carrying, possessing), prostitution and commercialized vice, other sex offenses, drug law violations, gambling, offenses against the family and children, driving under the influence, liquor law violations, drunkenness, disorderly conduct, vagrancy, suspicion, loitering, all other offenses.

³ Arrest occurred within 4 days before or after the gun seizure event.

⁴ Conviction connected to an arrest that occurred within 4 days before or after the gun seizure event.

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- ⁶ Fla. Stat. § 790.401 (2018)
- ⁷ H.B. 2354 (Ill. 2018)
- ⁸ Ind. Code Ann. §§ 35-47-14-1 - 35-47-14-10 (2018)
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- ¹⁰ H.R. 4670, 190th Gen. Ct., Reg. Sess. (Mass. 2018)
- ¹¹ Assemb. 1217, 218th Leg., Reg. Sess. (N.J. 2018)
- ¹² Or. Rev. Stat. §§ 166.525-166.543 (2018)
- ¹³ R.I. Gen. Laws Ann. §§ 8-8.3-1 - 8-8.3-14 (2018)
- ¹⁴ Vt. Stat. Ann. tit. 13, §§ 4051-4063 (2018)
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