POLICE, PERMITLESS CARRY LAWS, AND THE JUSTICE SYSTEM (HIGHLY PRELIMINARY - PLEASE DO NOT CIRCULATE)

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Abstract: This study examines how police respond to permitless carry laws, which allow individuals to carry concealed firearms in public without prior authorization from the government. Twenty-nine states have adopted permitless carry laws. We use the staggered adoption of the laws as a natural experiment to identify impacts on crime, arrests, police-involved shootings, and assaults against police officers. We find a 12% increase in the rate of aggravated assaults in the first two years after adoption but no significant change in the rate of other types of crime. However, we estimate a 20% drop in total "taken into custody" arrests in the first two years after adoption. Although a proportion of the decline is driven by arrests for weapons law violations, we also find spillover effects in arrests for robbery and burglary. Lastly, we find a 20% increase in fatal police shootings but mixed results on assaults against police officers.

Keywords: Crime, firearm, permitless carry, police.

I. Introduction

The criminal justice system depends on police enforcement of the law. A large empirical literature emphasizes the efficacy of police in deterrence (e.g., Chalfin and McCrary 2017, Mello 2019, Anker et al. 2021, Rose and Shem-Tov 2021). Police also retain broad discretion in which laws to enforce and how to enforce them. Despite the importance of enforcement decisions for deterrence, only a handful of studies have examined how police alter their enforcement targets in response to changes in criminal penalties or the costs of enforcement.[1] On responses to penalty changes, Adda et al. (2014) identified a reallocation of police effort towards non-drug crime after the depenalization of cannabis in a borough of London, England. The reallocation caused a decrease in crime. Conversely, Soliman (2022) examined a depenalization of drug crime in Louisville, Kentucky, and found a pullback in drug crime enforcement but no police effort reallocation nor any impact on crime.

Research has also studied the costs of enforcement through reputational concerns or legal consequences in use of force. Cheng and Long (2022) found a substantial pullback in proactive enforcement after high-profile police killings of civilians, and Devi and Fryer (2020) found a pullback in police agencies under "pattern or practice investigations." Campbell (2024) also

1. A related literature examines financial incentives and "policing for profit" in traffic stop revenue or civil asset forfeiture (Benson et al. 1995, Mast et al. 2000, Baicker and Jacobson 2007, Garett and Wagner 2009, Makowsky and Stratmann 2009, Holcomb et al. 2011, Makowsky et al. 2019, Harvey 2020, Kantor et al. 2021).

found pullbacks after Black Lives Matter protests. Finally, Mastrorocco and Ornaghi (2025) link lower rates of crime clearances to reduced local news coverage of crime reports.

This study examines how police respond to changes in permitless carry laws, which can alter criminal penalties and the risk of law enforcement. First, the laws reduce or eliminate criminal penalties for individuals who carry firearms. Second, permitless carry may alter the costs of enforcement through an increase in officer safety risk. If the laws lead to additional firearm carry behavior, police interactions with citizens may pose a higher risk for officers.

The policy landscape around the right to carry a concealed firearm has evolved rapidly over the last two decades. Twenty-nine states now have permitless carry laws. Twenty-seven of these states adopted the laws after 2010. Permitless carry, also known as "constitutional carry," allows any eligible adult to carry a concealed, loaded handgun in public without prior authorization from the government. Adults of a certain age, most often 21, are automatically eligible unless they have lost the right to purchase and possess a firearm through a felony conviction, domestic violence offense, or other disqualifier. Permitless carry laws are a departure from right-to-carry regulations, which typically require individuals to obtain a license, complete firearm training, and clear a background check to carry a concealed handgun in public.

Permitless carry laws have sparked debates around public safety and law enforcement (Reynolds 2022, Espriella 2023, Smith 2023). Crime is a focal point. Critics worry about the potential for an increase in firearm availability to cause an increase in violent crime. Proponents argue against the idea. Instead, they believe an increase in firearm availability should deter crime (Moody and Lott 2022). Research has recently begun to inform the crime debates with empirical studies on permitless carry laws. Several studies have found a positive impact of the laws on violent crime (Barati 2016, Crifasi et al. 2018, Doucette et al. 2023, Donohue et al. 2025, Parker 2026). In the emergent literature, any deterrence is apparently outweighed by other mechanisms. Although mechanisms merit further study, Donohue et al. (2025) posit two candidates. One is an increase in gun theft, and the other is a decrease in clearance rates. If police are less likely to solve crimes after the enactment of a permitless carry law, the deterrent threat from police arrests should fall (as opposed to a deterrent threat from individuals who carry handguns for self-defense).

Broader impacts of permitless carry laws on police behavior remain largely unstudied. Police opinions of the laws are mixed. For example, in a survey of three large police departments, police officers "did not express significant concerns about constitutional carry legislation" overall (Corsaro et al. 2024). However, representatives for law enforcement agencies frequently oppose constitutional carry laws out of concerns for officer safety (Newhard 2022). If permitless carry laws do increase safety risk, they create at least two incentives for police officers. First, officers may reduce enforcement for specific crimes with additional risk. Second, they may increase use of force. The predictions are empirically testable, but they complicate any test of the effects of permitless carry laws on officer safety itself, as the endogenous behavioral response may offset the additional risk.

To test the initial predictions, this study employs a stacked difference-in-differences design with FBI National-Incident Based Reporting System (NIBRS) data. We first examine incidents of crime. We estimate a 15% reduction in weapons law violation incidents in the first two years after the adoption of a permitless carry law, as well as a 12% increase in

aggravated assaults, but we find no evidence of impacts on other types of crime, specifically robbery, burglary, and drug violations.

Compared to crime incidents, police arrests appear to respond broadly to permitless carry laws. Arrests for weapons offenses should decline if a portion of prior firearm carry behavior is no longer a crime.[2] In line with the magnitude of the decline in weapons law violation incidents, both on-view and warrant, or "taken into custody," arrests for weapons law violations declined by approximately 15%. On-view arrests occur when an individual is taken into custody without a judicial warrant or previously submitted incident report, while warrant arrests involve at least one of the two. We find no impact of permitless carry laws on on-view arrests outside of the reduction for weapons violations. However, total warrant arrests for any type of offense drop by 20%. Although a proportion of the decline is explained by weapons law violations, we also find a 10% drop in warrant arrests for aggravated assaults, a 14% drop for both robbery and burglary, and a statistically insignificant 9% drop for drug violations. Collectively, the results show a broad drop in arrests based on follow-up investigations.

For officer use of force, we use data from the Washington Post "Fatal Force" database of police shootings. We estimate a 20% increase in fatal, police-involved shootings, which matches the predicted rise in use of force (cf. Doucette et al. 2022). For officer safety, we use the Law Enforcement Officers Killed and Assaulted (LEOKA) database. Results are mixed. Estimates indicate no rise in total officers killed or injured in assaults, but we estimate a 22% increase in the rate of assaults with a firearm in traffic stops. Again, if permitless carry laws do increase safety risk, the risk may be offset by changes in enforcement decisions.

The results have several implications for policy around permitless carry laws. Foremost, we document large spillover effects in arrests across multiple offense categories. The reduction in police enforcement does not appear to cause an increase in crime outside of aggravated assaults. The results imply a reduction in clearance rates driven mainly by pullbacks in enforcement rather than an increase in crime incidents and a higher police workload. Next, officers are more likely to use lethal force after the enactment of permitless carry laws, but the impacts on officer safety appear to be limited to traffic stops. Although assaults with a firearm in a traffic stop are relatively rare, we estimate a statistically significant rise after the adoption of permitless carry laws. These results can therefore inform the tradeoffs in permitless carry laws as gun policy continues to evolve across states.

II. Related Literature

Forthcoming.

III. Data Sources

III.1. **Permitless Carry Laws.** We use the RAND State Gun Law database to compile enactment dates of permitless carry laws from 2013-2024. In the analysis, primary results stop at 2020 to avoid the COVID-19 pandemic as a potential confounder. For those results, we exclude observations in states with adoption dates in 2018-2019 to preserve a two-year post-period window. See Appendix Table A1 and the empirical approach below.

2. Additionally, illegal carry becomes harder for police to identify without the requirement of a license.

III.2. **National Incident-Based Reporting System.** We use the FBI National Incident-Based Reporting System (NIBRS) for the primary data source, as NIBRS contains more detailed information than the older Uniform Crime Reports. In particular, NIBRS allows for the definition of a clearance as an incident associated with an arrest. NIBRS also provides more accurate information on whether a firearm was used in an offense, partly because NIBRS abandons the hierarchy rule, under which only the most serious offense is recorded for any incident. We include only law enforcement agencies who report data in each month of a sample year. We also exclude agencies with no population in NIBRS, such as state or campus police agencies. The FBI fully transitioned to NIBRS in 2021, but many law enforcement agencies began to report to NIBRS before the official transition. NIBRS covers all states with newly adopted permitless carry laws in 2015-2019. However, coverage may not include all law enforcement agencies within a state. We use NIBRS to identify offenses, arrests, and clearance outcomes. In subanalyses, we examine arrests by race and age. Race categories include white, black, and other, but the information is imperfectly captured. Many law enforcement agencies in the US do not gather reliable data on race/ethnicity (Rodriguez and Tublitz 2023).

III.3. **Uniform Crime Reports.** In robustness checks, we also use the Federal Bureau of Investigation (FBI) Uniform Crime Reporting (UCR) program, which, for decades, gathered data on known offenses and arrests in voluntary reports from law enforcement agencies. The UCR Summary Reporting System (SRS) captures monthly counts of crime incidents, arrests, and clearances. To obtain the most comprehensive sample of reports in the active window of permitless carry law adoption, we use UCR SRS data from 2013-2019. Although the FBI transitioned from UCR SRS to NIBRS in 2021, the FBI continued to produce SRS files throughout the transition. In robustness checks, we extend the sample through 2023.

III.4. **Police Stops and Offenses in Treated Jurisdictions.** Because neither UCR nor NIBRS data contain information on police stops that do not result in an arrest, we also examined detailed police data in Louisville, Kentucky. The data contain geographic information on the location of stops, incidents, and arrests, which are otherwise unavailable in UCR and NIBRS data. We use information on pedestrian and motor vehicle stops to analyze enforcement targets. In particular, we assess whether permitless carry laws cause a reduction in police stops in neighborhoods at high risk for gun violence.

III.5. **Police Shootings and Officer Assaults.** We use the Washington Post "Fatal Force" database to analyze fatal shootings by on-duty police officers. We also use the Law Enforcement Officers Killed and Assaulted (LEOKA) database to examine assaults on law enforcement personnel.

IV. Empirical Approach

This study uses a stacked difference-in-differences (DiD) framework to identify the impacts of permitless carry laws on criminal justice outcomes. DiD estimates compare changes in the outcomes for states who adopted the laws to changes in outcomes for states who did not

adopt the laws. Let y_{it} denote an outcome for state i in year-quarter t. The primary DiD model specification is

$$y_{it} = \alpha_i + \gamma_t + \beta D_{it} + \varepsilon_{it}, \tag{1}$$

where α_i and γ_t are state and time period fixed effects. The indicator D_{it} is set to one if the state adopted a permitless carry law and the year-quarter is after its enactment. Lastly, ε_{it} is the idiosyncratic error term. Under the parallel trends assumption, β conveys the average impact of permitless carry law adoption on the outcome. To assess the assumption, we also run event-study versions of model (1):

$$y_{it} = \alpha_i + \gamma_t + \sum_{k \in [-8,8]} \beta_k D_{i,t-k} + \varepsilon_{it}, k \neq -1. \tag{2}$$

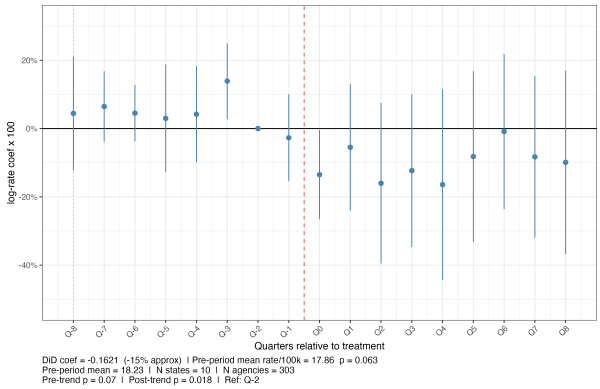
Lastly, to avoid bias from potential anticipation effects, we provide "donut" DiD results that omit the quarter before enactment (forthcoming). Thus, $k = -1$ corresponds to the year-quarter two periods before enactment in those results.

V. Results

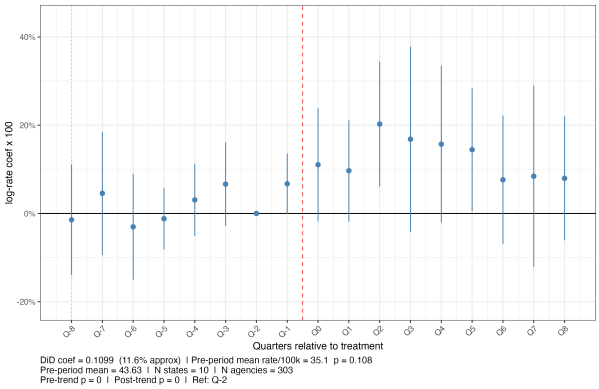
V.1. **Incidents.** Figure 1 provides event-study estimates for the impact of permitless carry laws on crime incidents. Panel (a) displays results for weapons law violations. The difference-in-difference (DiD) coefficient estimate indicates a 15% reduction in weapons law violation incidents in the first two years after the adoption of a permitless carry law. Weapons law offenses are a pooled measure of any violation of laws for weapons possession—including knives or other weapons—and may include the sale, manufacture or possession of a weapon. While the measure contains noise in the specific identification of firearms, it captures information for incidents of illicit firearm possession, as a majority of the incidents involve illegal possession of a firearm.

As seen in panel (b), the rate of aggravated assault rose by 12%. In Appendix Figure 1 (forthcoming), we estimate an even larger increase in the rate of aggravated assault with a firearm. Panels (c)-(e) provide results on robbery, burglary, and drug violation incidents, respectively. Across the crime outcomes, DiD estimates were statistically insignificant and near zero except for the drug violation estimate, which indicated a 17% rise but remained statistically insignificant. Across panels (a)-(e), the event-study coefficients in the pre-period appear consistent with the parallel trends assumption.

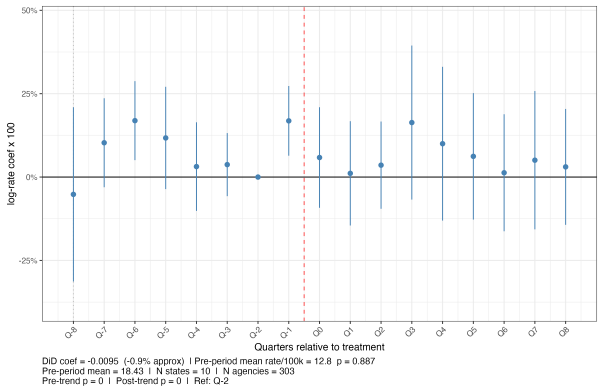
FIGURE 1. Event Study – Crime Incidents.



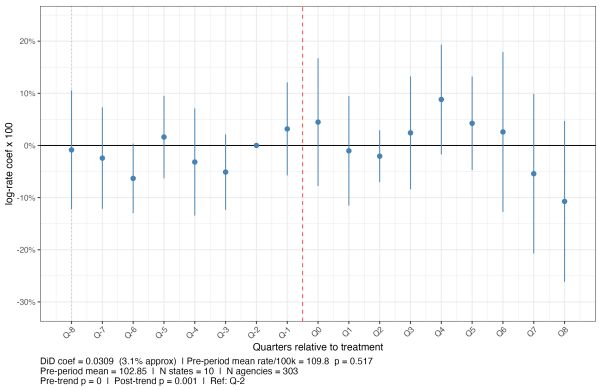
(a) Weapons Violations



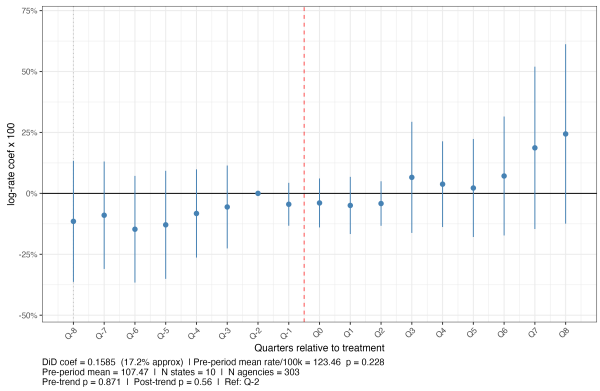
(b) Aggravated Assaults



(c) Robbery



(d) Burglary



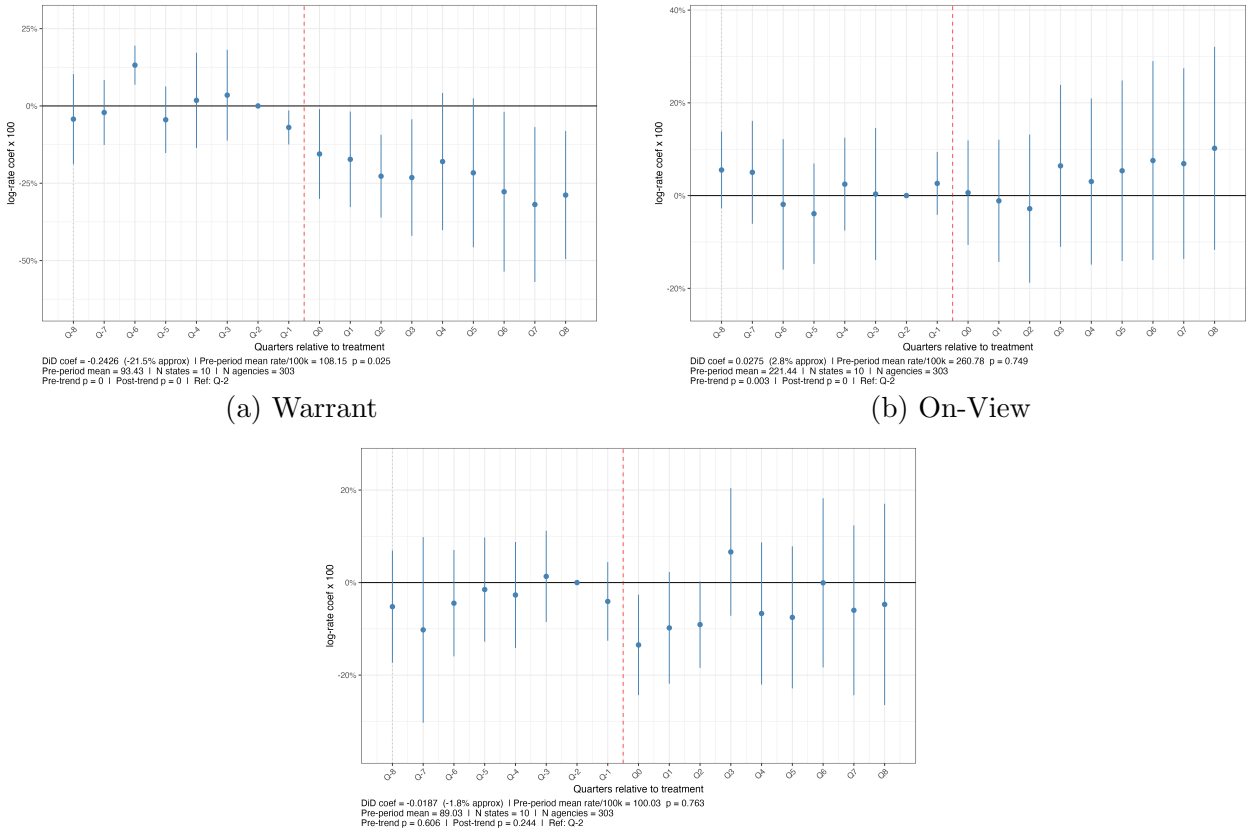
(e) Drug Violations

V.2. **Total Arrests.** Next, we examine how police enforcement, as measured by arrests, responds to permitless carry laws. Figure 2 presents estimates for total arrests by arrest type.[3] The rate of arrests made "on view" remained flat across the enactment of the laws.

3. In NIBRS data, the arrest types correspond to O for on-view, S for summoned/cited, and T for taken into custody.

On-view arrests occur when an arrestee is taken into custody without a prior warrant or incident report. The rate of cite-and-release arrests also remained flat. A cite-and-release arrest occurs when an individual is not taken into custody but is instead issued a summons or notice to appear in court at a future date. However, warrant, or "taken into custody," arrests declined substantially after the implementation of permitless carry laws. The DiD estimate indicates a 20% reduction. Warrant arrests occur when an individual is taken into custody based on either an existing warrant or a prior incident report.

FIGURE 2. Event Study – Total Arrests by Type.



(a) Warrant (b) On-View

(c) Cite-and-Release

V.3. **Arrests by Offense Type.** Figures 3 and 4 provide DiD estimates for on-view and warrant arrests, respectively, decomposed by offense type. For either type of arrest, we find significant decreases in arrests for weapons law violations. Both on-view and warrant arrests declined by approximately 15%.

Figure 3, panel (b) shows a modest though statistically insignificant increase in arrests for on-view aggravated assault arrests. The shift is consistent with a rise in police encounters for additional assaults in routine police work, as earlier estimates indicated a rise in aggravated assaults. Panels (c) and (d) show flat trends in on-view arrests for robbery and burglary, and panel (e) shows a slight but insignificant rise in on-view arrests for drug violation offenses.

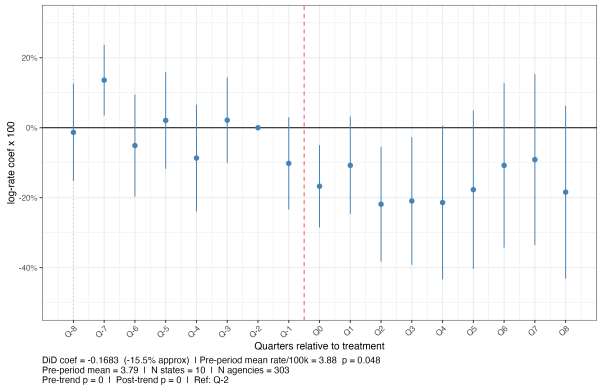
Conversely, Figure 4 shows a fall in warrant arrests for each offense type. The results for drug violations are imprecisely estimated with a p-value of 0.48, and the results for aggravated assault are not quite significant at conventional levels (p-value of 0.15). Warrant arrests for robbery and burglary each fell by 14-15%.

Changes in on-view arrests are often highly correlated with proactive enforcement through police encounters. Changes in warrant arrests are more strongly associated with police investigation and follow-up on reported crimes. Although warrant arrests may be based on an actual judicial warrant, these arrests can also be based on a prior incident. NIBRS does not track the existence of a judicial warrant, but the vast majority of arrests of any type are made without a warrant (add citation). The results are therefore consistent with limited changes in police encounters but potentially large changes in police follow-up on earlier incidents. Importantly, the results suggest the pullback in warrant arrests has spillover effects outside of weapons law violations.

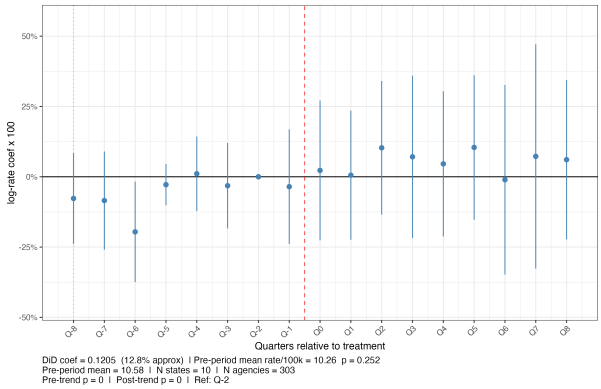
To disentangle reductions in police effort from potential reallocation, Figure 5 examines weapon law offenses by age. Panel (a) presents results for total arrests of individuals under age 18. DiD estimates indicate no change in arrests after the enactment of permitless carry laws. Panel (b) presents results for individuals aged 18-29, for whom total arrests declined by 29%. Even after permitless carry laws, individuals under age 18 are prohibited from the carry of a concealed weapon. The null result on arrests for individuals under age 18 indicates a continuation of police enforcement for weapons violations in general, but the decrease in arrests for individuals aged 18-29 indicates a pullback from enforcement for individuals likely to be affected by the policy change.

To-do: Identify whether the spillover effects are driven by co-occurrence offenses (a weapons law violation enforcement that would also be counted as a drug violation arrest if, e.g., drugs are found at the scene) or a more general pullback.

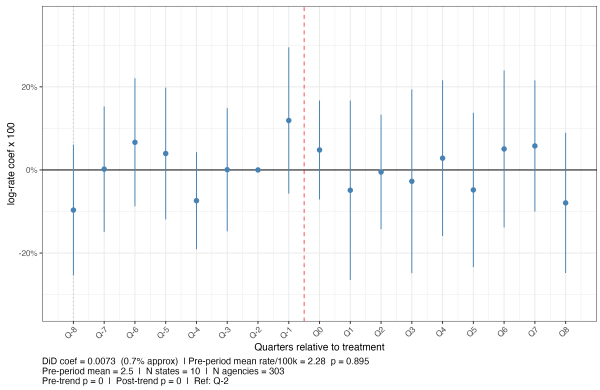
FIGURE 3. Event Study – On-View Arrests by Offense Type.



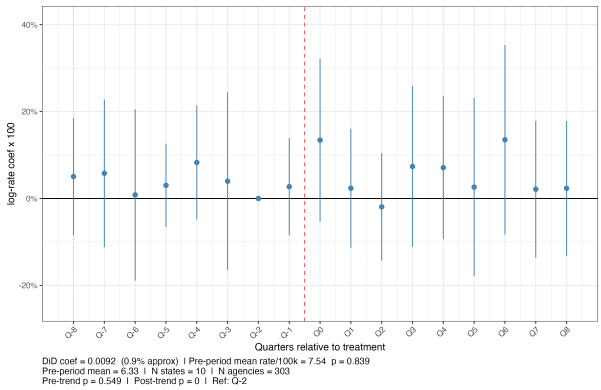
(a) Weapons Violations



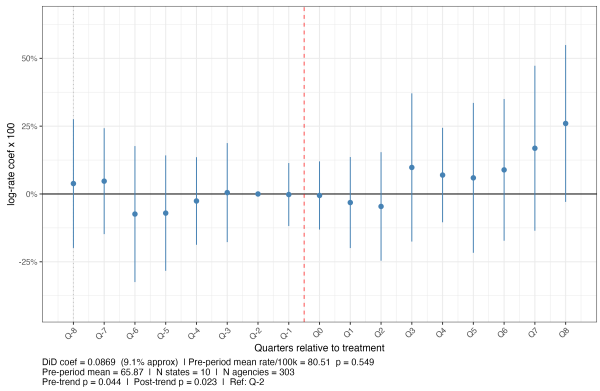
(b) Aggravated Assaults



(c) Robbery

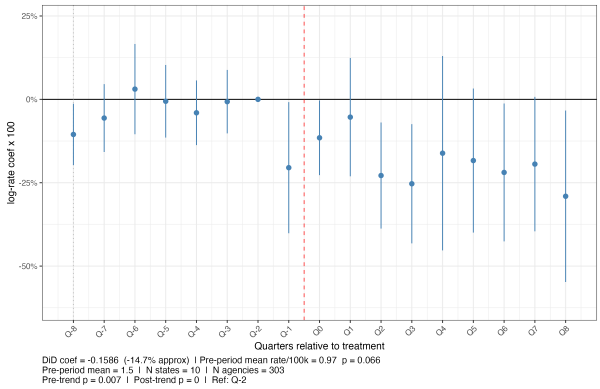


(d) Burglary

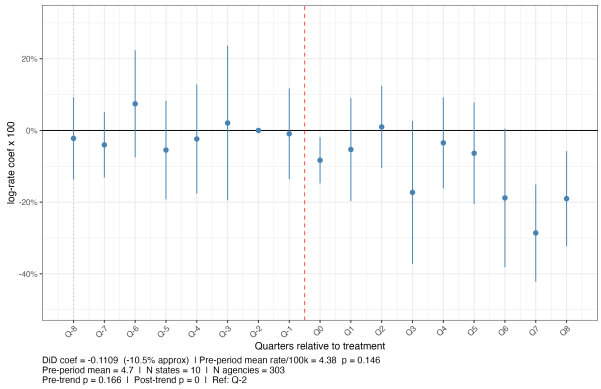


(e) Drug Violations

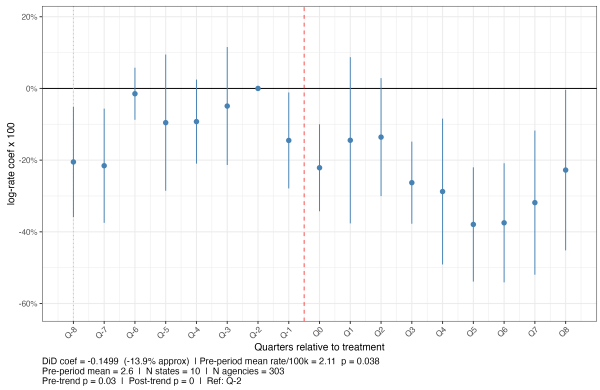
FIGURE 4. Event Study – Warrant Arrests by Offense Type.



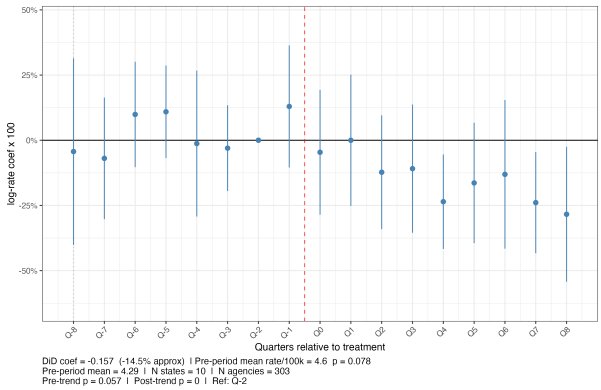
(a) Weapons Violations



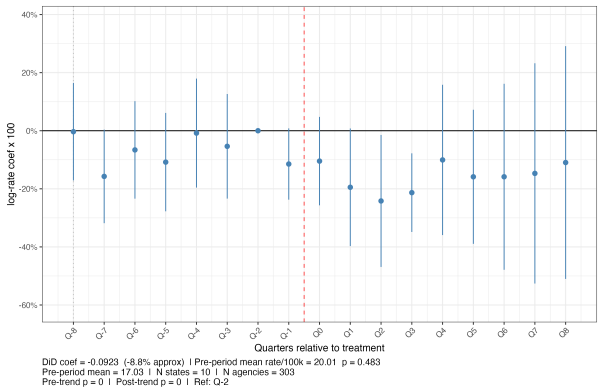
(b) Aggravated Assaults



(c) Robbery

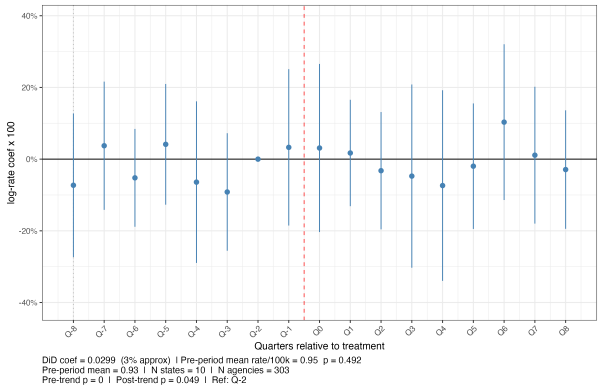


(d) Burglary

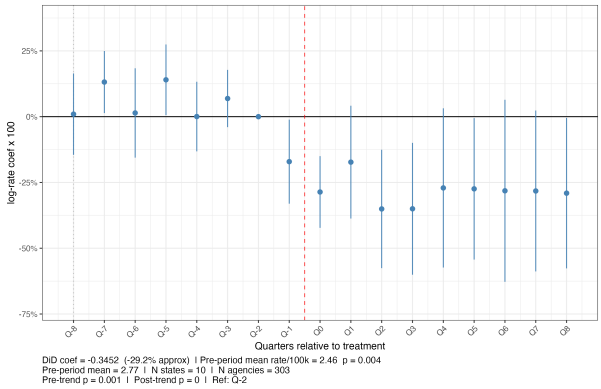


(e) Drug Violations

FIGURE 5. Event Study – Total Arrests by Age: Weapons Law Violations.



(a) Weapons Violations - Under Age 18



(b) Weapons Violations - Age 18-29

V.4. **Police Shootings and Officer Injuries.** Figure 6 shows the effects of permitless carry laws on fatal police shootings at the state-year level. We find a significant, 20% increase in fatal police shootings in the three years following permitless carry law adoption. Finally, in Figure 7, we present the effects of permitless carry law adoption on officer injury in situations of differential risk for individuals to carry fierarms, and where officers may be more likely to sustain injuries from assaults. In panel (a), we find a significant decline in officers who are injured. In panel (b), (b), we find imprecise, null results on total officers killed. We turn to traffic stops in panels (c) and (d). Traffic stops may be a situation in which a lessened ability to detect illicit weapons can alter the safety risk to an officer. We find no decline in overall traffic injuries but an increase of 22% in injuries involving firearms.

FIGURE 6. Event-Study – Police-Involved Shootings

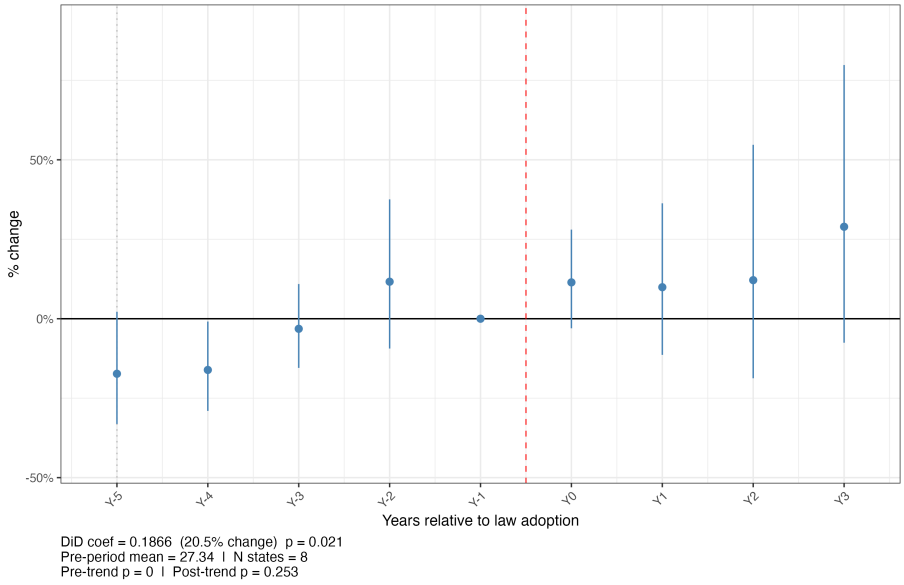
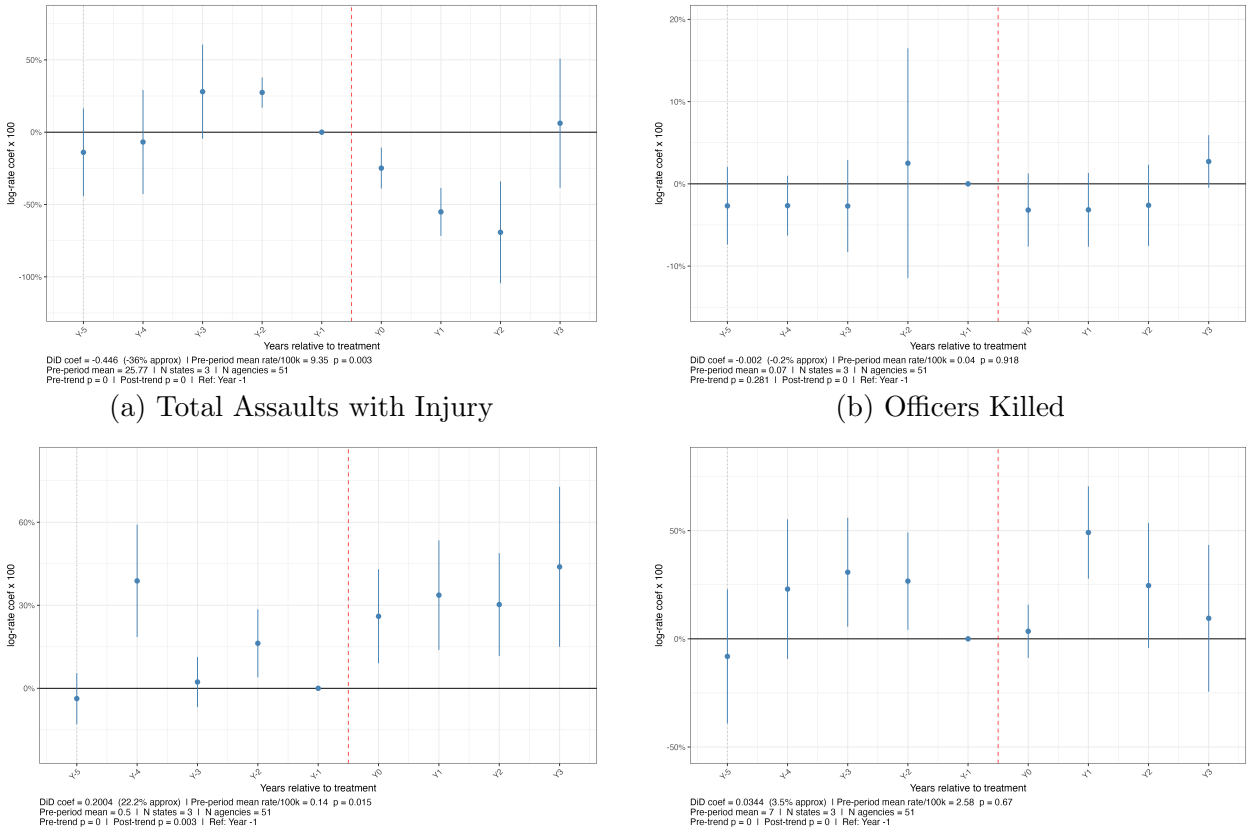


FIGURE 7. Event Study – Officers Assaulted



(a) Total Assaults with Injury

(b) Officers Killed

(c) Traffic Assault with Firearm

(d) Traffic Assault Total

V.5. **Robustness and Sensitivity.** NIBRS results are limited to agencies who adopted the new reporting system before the official FBI transition in 2021. Thus, the sample composition may not reflect a national sample of all police agencies. For a more representative sample, we replicate our crime and arrest results with Uniform Crime Reporting System (UCR) Summary Reporting System (SRS) data. Because UCR data are less detailed than NIBRS data, we are limited to total offenses and total arrests by offense category. We find similar estimates overall with the UCR SRS sample, with an estimated 9.4% increase in aggravated assaults and no increase in total robbery (Appendix Figure A.2, forthcoming). We find a decline in weapons law arrests of 15.7% (Appendix Figure A.3, forthcoming).

Because many of our crime outcomes are rare for agencies in the sample, there is a high proportion of zero observations even aggregated to the quarter-level. We also re-estimate our main effects using Poisson stacked difference-in-differences models and find results consistent with our main reported effects (Appendix Figures A.4-A.5, forthcoming).

VI. CONCLUSION

Forthcoming.

VII. Acknowledgments.

We thank xx, yy, and zz for comments on the study.

Appendix

Table A1. Treatment States by Law Passage and Effective Date

State	Effective Date	Passage Date
KS	2015-07-01	2015-04-02
ME	2015-10-15	2015-07-08
MS	2016-04-15	2016-04-15
WV	2016-05-24	2016-02-21
ID	2016-07-01	2016-03-28
MO	2017-01-01	2016-09-14
NH	2017-02-22	2017-02-22
ND	2017-08-01	2017-03-23
KY	2019-06-26	2019-03-11
SD	2019-07-01	2019-01-31
OK	2019-11-01	2019-02-27
MT	2021-02-18	2021-02-18
UT	2021-05-05	2021-02-12
IA	2021-07-01	2021-04-02
TN	2021-07-01	2021-04-08
TX	2021-09-01	2021-06-16
GA	2022-04-12	2022-04-12
OH	2022-06-13	2022-03-14
IN	2022-07-01	2022-03-21

Notes: Effective Dates obtained from the RAND State Gun Law Database. Passage dates obtained from review of news articles.