

Supporting Information

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Summary Statistics

Tables S1 and S2 provide summary statistics for variables used in the main analyses. Table S1 shows summary statistics for variables used for analyses presented in Table 1, covering the full 1970–2014 sample period. Table S2 shows summary statistics for variables used for the analysis of the Brady interim period in Table 2, covering 1990–1998.

Identifying Policy Changes

In our first set of analyses, covering 1970–2014, we extend prior coding of policy changes by including an additional 36 y of data with 25 changes in waiting period policies. Our approach to identifying changes in waiting period policies also improves on Ludwig and Cook's (8) classification of states affected by the Brady Handgun Violence Prevention Act. Prior research coded all states subject to the Brady Act's interim provisions as treatment states, but some of these states already had background checks and/or waiting periods before the interim period. Table S4 details the differences between our coding and that of Ludwig and Cook (8). In total, our coding differs for 16 states; the table footnotes provide supporting citations for each difference. We find that these improvements more accurately measure the effects of waiting periods on homicides, which we now find to be robust and statistically significant at conventional levels, even when we restrict the sample to the same years examined in prior research.

Robustness: State-Specific Trends

If states that do and do not adopt waiting periods have different trends in violence before the implementation of the waiting period, then one might be concerned that our results reflect these different trends rather than the impact of the waiting period policy. To allow for the possibility of differential secular trends, Table S3 estimates a log-linear model with linear trends that vary by state for the 1970–2014 time period [We do not estimate models with state-specific trends for the analysis of the Brady interim period (1990–1998) because there is too little pretreatment data to identify preexisting, state-specific trends in gun violence (14)]. This model produces similar estimates for the effect of waiting periods on homicides, suggesting that differential trends are not the main driver of the results and providing further support for our interpretation. The results for suicides, however, differ across specification and are not robust to the inclusion of control variables and state-specific trends in suicide. The model without trends in column 3 of Table 1 suggests that waiting periods reduce gun suicides by 7%, while the model in column 3 of Table S3 suggests no reduction. The results of Table S3 also suggest that any decrease in gun suicides due to waiting periods is offset by an increase in non-gun suicides.

Robustness: Falsification Exercise and Dynamic Effects

To shed further light on the dynamics of the effects shown in Table 1, Table S6 reestimates the model in column 3 of Table 1, but includes leads and lags of the policy change, specifically including indicator variables for the years before and after implementation of a waiting period. We find that the impact of

waiting periods does not appear until the waiting period has been adopted, providing further support for our causal interpretation. Violence appears to fall soon after implementation, although the single-year estimates are imprecise.

Robustness: Other Changes in Gun Policy

While the results overall point to the causal effect of waiting periods, one might still be concerned that other gun policy changes are correlated with the timing of waiting period changes. To address this concern, we provide evidence that the effects reported in Table 1 are robust to the inclusion of controls for other gun policies in a state. Specifically, in Table S5, we reestimate the models of columns 2 and 3 in Table 1, but include additional variables for handgun permit and concealed carry policies to account for potential correlation between the implementation of these policies and waiting periods. The results in Table S5 show that the inclusion of other gun policies in the model does not change our conclusion that waiting periods reduce gun homicides and suicides. Our study uses a natural experiment embedded in the Brady Act to identify the impact of waiting periods; estimating the causal impact of exogenous changes to other gun policies is beyond the scope of this study. Other research focuses on the impact of handgun permits (15, 16) and concealed carry laws (17–20).

Alternative Model Specifications

Alternative specifications for the effect of waiting periods on homicides and suicides produce similar point estimates (Tables S7 and S8). The estimates in Table S7 are based on models linear in the rate of violence. The results in columns 2 and 3 imply that waiting periods reduce gun homicides by roughly 18% and gun suicides by 5–9% for a state with an average rate of violence. Results for the Poisson model (Table S8) imply reductions of 18–20% and 7–11.6% for gun homicides and suicides, respectively, while estimates based on the log-linear model presented in the main text and Table 1 imply 17% and 7–11% reductions.

Additionally, we examine unweighted, least-squares estimates (Tables S9 and S10). The coefficient estimates on the waiting period dummy from the unweighted regressions are attenuated relative to the weighted results. This suggests that the effect of waiting period policies is heterogeneous, with larger states experiencing greater reductions in violence than smaller states (21). To ensure our results are not driven by outlier states, we reestimate the model of gun homicide and suicide rates (column 3 of Table 1), but exclude one state at a time. Fig. S1 shows the 51 resulting coefficients (one from excluding each state and the District of Columbia) for homicides and suicides. The coefficient estimates are consistently negative. As expected from the difference between the weighted and unweighted estimates, large states like Pennsylvania and Florida seem to exert downward pressure on the coefficient.

Complete Coefficient Estimates

Table S11 presents coefficient estimates for all variables included in model 3 of Table 1. This model uses the same control variables as prior research by Ludwig and Cook (8).

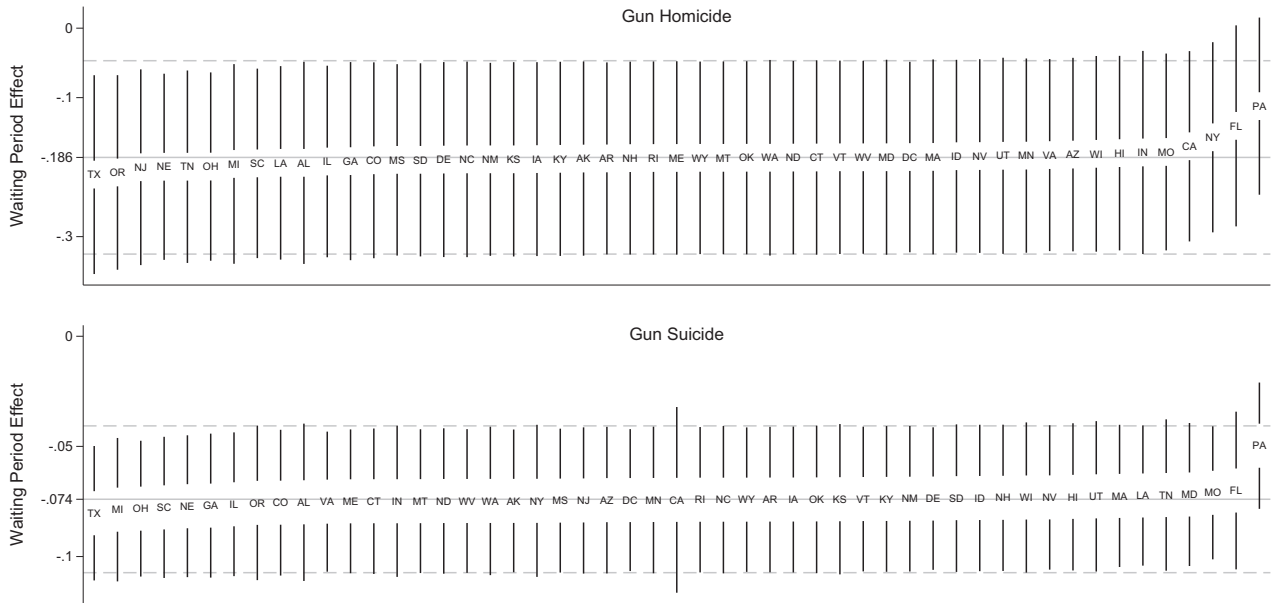


Fig. S1. Estimates of the effect of waiting periods on gun homicides and suicides, dropping each state individually from the analysis and reestimating model 3 of Table 1. Bars are $1.96 \pm$ SE of the waiting period coefficient. Solid lines mark the full sample estimates, and dashed lines are $1.96 \pm$ full sample SE.

Table S1. State-level summary statistics: 1970–2014 (Table 1)

Variable	Mean	SD	p5	p10	p50	p90	p95
Years 1970–2014							
Gun homicide rate	5.7	4.9	1.0	1.4	4.4	11.1	14.4
Homicide rate	8.5	6.7	2.1	2.6	6.8	15.6	19.4
Gun suicide rate	10.2	4.2	3.1	4.0	10.2	15.0	17.1
Suicide rate	17.3	4.7	10.2	11.9	16.7	23.7	26.0
Handgun waiting period	0.45	0.49	0	0	0	1	1
Background checks	0.64	0.48	0	0	1	1	1
Years 1977–2014 (Control variables for model 3)							
Alcohol consumption	2.9	0.8	2.0	2.1	2.7	3.8	4.3
Income per capita	25.4	5.8	17.2	18.6	24.8	32.6	35.7
Demographics, %							
Poverty	13.1	4.0	7.9	8.7	12.5	18.5	20.9
Urban areas	64.2	20.1	29.5	35.5	64.9	89.0	91.9
Black	11.2	11.8	0.4	0.7	7.4	27.5	32.1
Ages 0–14 y	21.4	2.4	17.9	18.7	21.3	24.3	25.8
Ages 15–17 y	4.5	0.6	3.7	3.9	4.4	5.5	5.8
Ages 18–24 y	10.9	1.6	8.9	9.2	10.3	13.4	13.8
Ages 25–34 y	15.1	2.2	12.0	12.5	15.0	17.9	18.7
Ages 35–44 y	14.0	1.9	10.8	11.3	14.1	16.3	16.9
Ages 45–54 y	12.0	2.2	9.0	9.3	12.0	14.9	15.4
Ages 55–64 y	9.7	1.7	7.6	7.9	9.2	12.3	12.9

Homicide and suicide rates are adult (21+) deaths per 100,000 adult residents. Alcohol consumption is measured in gallons of ethanol per capita, and income is measured in thousands of 1998 dollars. Demographic control variables are percentages of total state population. Columns beginning with “p” represent percentiles of the distribution; for example, “p10” means the 10th percentile.

Table S2. State-level summary statistics: 1990–1998 (Table 2)

Variable	Mean	SD	p5	p10	p50	p90	p95
Gun homicide rate	5.9	6.1	1.0	1.4	4.6	10.4	12.3
Homicide rate	8.8	8.0	2.1	2.7	7.0	14.7	18.3
Gun suicide rate	10.2	4.0	3.2	4.0	10.6	15.0	17.3
Suicide rate	16.6	4.5	9.6	11.4	16.1	22.7	24.9
Handgun waiting period	0.63	0.47	0	0	1	1	1
Background checks	0.74	0.43	0	0	1	1	1
Alcohol consumption	2.6	0.6	2.0	2.1	2.6	3.1	4.1
Income per capita	24.3	3.8	19.1	19.9	23.9	29.1	31.7
Demographics, %							
Poverty	13.3	4.0	8.2	8.9	12.5	19.0	21.1
Urban areas	63.5	19.9	29.0	35.1	63.9	87.5	91.1
Black	11.1	12.0	0.4	0.5	7.3	27.5	31.9
Ages 0–14 y	21.9	1.9	19.4	20.0	21.6	24.1	25.2
Ages 15–17 y	4.3	0.5	3.5	3.7	4.2	4.9	5.1
Ages 18–24 y	9.9	0.9	8.4	8.9	9.9	11.0	11.6
Ages 25–34 y	15.7	1.6	13.1	13.7	15.6	17.7	18.4
Ages 35–44 y	16.0	1.0	14.4	14.8	15.9	17.1	17.7
Ages 45–54 y	11.5	1.2	9.7	10.0	11.5	13.1	13.5
Ages 55–64 y	8.2	0.7	7.1	7.5	8.2	8.9	9.1

Homicide and suicide rates are adult (21+) deaths per 100,000 adult residents. Alcohol consumption is measured in gallons of ethanol per capita; income is thousands of 1998 dollars. Demographic control variables are percentages of total state population. Columns beginning with “p” represent percentiles of the distribution; for example, “p10” means the 10th percentile.

Table S3. States that implemented background checks and waiting periods during the Brady Act's interim period from February 1994 through November 1998, according to Ludwig and Cook (8) and this study

State	Ludwig and Cook (8)		New coding (this study)	
	Background check	Waiting period	Background check	Waiting period
Alabama*	■	■	■	■
Alaska	■	■	■	■
Arizona†	■	■	■	□ Feb–Oct 1994
Arkansas	□	□	□ Feb 1994–June 1997	□ Feb 1994–June 1997
California				
Colorado	■		■	
Connecticut				
Delaware				
District of Columbia				
Florida				
Georgia‡	■	■	■	□ Feb 1994–Dec 1995
Hawaii				
Idaho§	■	■	■	□ Feb–May 1994
Illinois				
Indiana				
Iowa				
Kansas	■	■	■	■
Kentucky	■	■	■	■
Louisiana	■	■	■	■
Maine	■	■	■	■
Maryland				
Massachusetts				
Michigan				
Minnesota¶	■	■	■	■
Mississippi	■	■	■	■
Missouri				
Montana	■	■	■	■
Nebraska#	■	■	■	■
Nevada 			■	
New Hampshire**	■	■	■	□ Feb–Dec 1994
New Jersey				
New Mexico	■	■	■	■
New York				
North Carolina††	■	■	■	■
North Dakota	■	■	■	■
Ohio‡‡	□	□	□ Feb 1994–June 1997	
Oklahoma	■	■	■	■
Oregon				
Pennsylvania§§	■	■	■	■
Rhode Island¶¶	■	■	■	■
South Carolina##	■	■	■	■
South Dakota 	■	■	■	■
Tennessee***	■	■	■	■
Texas	■	■	■	■
Utah	■	■	■	■
Vermont	■	■	■	■
Virginia				
Washington†††	■	■	■	■
West Virginia	■	■	■	■
Wisconsin				
Wyoming	■	■	■	■

The coding of states in boldface differs; an explanation of differences is provided in table footnotes. Dates are noted for cases in which policies changed during the interim period. ■, state got policy for full interim period; □, state got policy for part of interim period.

*Alabama had a 2-d waiting period on handgun purchases before implementation of the Brady Act (Code of Ala. § 13A-11-77).

†Arizona created an instant check background system in October 1994, and therefore had effectively no waiting period for most of the Brady Act's interim period (Ariz. Rev. Stat. Ann. § 13-3114).

‡Georgia implemented an instant check system in January 1996 (Ga. Code Ann. § 16-11-170).

§Idaho implemented an instant check system in June 1994 (Ida. Code § 19-5403).

¶Minnesota created a permit system in 1977 that required background checks and a 7-d waiting period for handgun purchases (Minn. Stat. § 624.7131 et seq.).

#Nebraska was exempt from the Brady Act (22, 23). Furthermore, it created a handgun permit system with a background check and 2-d waiting period in 1991 (Neb. Rev. Stat. § 69-2404 et seq.).

||Ludwig and Cook (8) say Nevada was classified as a control state because its pre-Brady Act laws were strict enough to warrant an exemption even though it was subject to the Brady Act. We cannot find evidence of this; Nevada had neither a background check nor waiting period requirement before implementation of the Brady Act (24) and was subject to the act's provisions (23). We classify the state as not having a waiting period because the state implemented an instant check system (25).

**New Hampshire implemented an instant check system in January 1995 (N.H. Rev. Stat Ann. § 159-C).

††We classify North Carolina as a control state because it implemented a handgun permit system in 1919 (N.C. Gen. Stat. § 14-402 et seq.). An explicit background check requirement was not added to the statutes until 1995, but the law previously required superior court clerks to certify that handgun permit applicants were of "good moral character" and included felonies, indictments, fugitive status, and mentally ill persons among those not of such character (N.C. Gen. Stat. § 14-404).

‡‡Ohio was subject to the Brady Act's interim provisions (22, 23) but had instant background checks (25), and is therefore coded as not implementing a waiting period. Like Ludwig and Cook (8), we code Ohio as stopping background checks after the Supreme Court's decision in *Printz v. United States* in June of 1997. We cannot find a statute or executive order for Ohio, and therefore rely exclusively on federal government reports (22, 23, 25).

§§Pennsylvania already had a 2-d waiting period before implementation of the Brady Act (24). We therefore code the state as only implementing the Brady Act's background check provisions. The state abandoned its waiting period in 1998 when instant checks became available (text and legislative history of 18 Pa.C.S.A. § 6111).

¶¶Rhode Island was subject to the Brady Act despite requiring both a background check and waiting period as part of its handgun permit process before 1994 (24). It therefore did not newly implement background checks or waiting periods as a result of the Brady Act (R.I. Gen. Laws § 11-47-35 et seq.).

##South Carolina's Law Enforcement Division ran an instant check system at the time the Brady Act was implemented (22, 25, 26), and is therefore coded as not implementing a waiting period. South Carolina's governor created the instant check system by executive order (26).

|||South Dakota had a 2-d waiting period before implementation of the Brady Act (since at least 1935) that was not repealed until 2009 (S.D. Codified Laws § 23-7-9).

***Tennessee was subject to the Brady Act even though it already required a background check and 15-d waiting period (24) (Tenn. Code Ann. § 39-17-1316). It is therefore coded as not newly implementing these laws due to the Brady Act's interim provisions.

†††Washington had background checks before the Brady Act but was not Brady-exempt because it did not require the chief law enforcement officer in the area where the purchaser lived to conduct the check (Wash. Rev. Code Ann. § 9.41.090).

Table S4. Effects of handgun waiting periods and background checks on violence, including state-specific trends, 1970–2014

Type of violence	1970–2014		1977–2014
	(1)	(2)	(3)
All homicide			
Waiting period	−0.118 (0.049)**	−0.129 (0.049)**	−0.086 (0.045)*
Background check		0.033 (0.057)	0.001 (0.047)
Gun homicide			
Waiting period	−0.181 (0.066)***	−0.195 (0.071)***	−0.124 (0.050)**
Background check		0.043 (0.077)	0.014 (0.068)
Non-gun homicide			
Waiting period	−0.011 (0.039)	−0.014 (0.038)	−0.030 (0.047)
Background check		0.011 (0.051)	−0.015 (0.035)
All suicide			
Waiting period	0.015 (0.013)	0.017 (0.013)	0.022 (0.016)
Background check		−0.005 (0.017)	−0.006 (0.015)
Gun suicide			
Waiting period	−0.044 (0.017)**	−0.045 (0.020)**	−0.012 (0.016)
Background check		0.002 (0.018)	−0.017 (0.017)
Non-gun suicide			
Waiting period	0.056 (0.019)***	0.050 (0.020)**	0.048 (0.024)*
Background check		0.020 (0.022)	0.019 (0.024)

Coefficients represent the effects of waiting periods and background checks on the natural logarithm of deaths per 100,000 adult residents. Models mirror Table 1, but include a state-specific, linear trend in addition to state and year fixed effects. Models 1–2 include only the policy variables shown. Model 3 follows the specification of Ludwig and Cook (8) and uses fewer years of data due to missing control variables in earlier years. SEs, shown in parentheses, are clustered by state. * $P < 0.10$; ** $P < 0.05$; *** $P < 0.01$.

Table S5. Effect of handgun waiting periods relative to adoption year, 1977–2013

Time relative to waiting period	Homicides			Suicides		
	All	Gun	Non-gun	All	Gun	Non-gun
	(1)	(2)	(3)	(4)	(5)	(6)
2 y before	−0.024 (0.047)	−0.038 (0.056)	0.004 (0.060)	0.015 (0.021)	0.001 (0.024)	0.045 (0.031)
1 y before	−0.053 (0.051)	−0.076 (0.060)	−0.014 (0.052)	0.025 (0.017)	0.003 (0.018)	0.046 (0.029)
Adoption year	−0.087 (0.054)	−0.106 (0.077)	−0.063 (0.051)	0.008 (0.021)	−0.014 (0.026)	0.006 (0.034)
1 y after	−0.147 (0.060)**	−0.178 (0.080)**	−0.11 (0.065)*	−0.032 (0.022)	−0.082 (0.026)***	−0.016 (0.032)
2 y after	−0.147 (0.058)**	−0.176 (0.082)**	−0.086 (0.043)*	−0.004 (0.016)	−0.061 (0.023)***	0.039 (0.030)
3 y after	−0.145 (0.060)**	−0.198 (0.083)**	−0.048 (0.053)	−0.007 (0.017)	−0.063 (0.022)***	0.04 (0.034)
4+ y after	−0.129 (0.053)**	−0.188 (0.072)**	−0.021 (0.041)	−0.022 (0.012)*	−0.071 (0.016)***	−0.006 (0.037)

Models mirror column 3 of Table 1, but include an indicator variable for years before and after implementation of the waiting period * $P < 0.10$; ** $P < 0.05$; *** $P < 0.01$.

Table S6. Estimates of the waiting period effect, controlling for other gun policies

Type of violence	1970–2014	1977–2014
	(1)	(2)
All homicide		
Waiting period	−0.141 (0.061)**	−0.137 (0.051)**
Background check	0.054 (0.065)	0.019 (0.068)
Handgun permit	0.021 (0.089)	0.051 (0.091)
Shall-issue CCW	0.002 (0.104)	0.056 (0.095)
May-issue CCW	0.006 (0.118)	0.062 (0.097)
Gun homicide		
Waiting period	−0.201 (0.086)**	−0.194 (0.074)**
Background check	0.010 (0.084)	0.007 (0.090)
Handgun permit	0.075 (0.093)	0.084 (0.125)
Shall-issue CCW	−0.019 (0.119)	0.078 (0.118)
May-issue CCW	−0.035 (0.137)	0.046 (0.118)
Non-gun homicide		
Waiting period	−0.033 (0.055)	−0.035 (0.033)
Background check	0.135 (0.055)**	0.042 (0.053)
Handgun permit	−0.077 (0.100)	0.006 (0.054)
Shall-issue CCW	0.063 (0.083)	0.045 (0.062)
May-issue CCW	0.110 (0.096)	0.118 (0.073)
All Suicide		
Waiting period	−0.037 (0.023)	−0.016 (0.011)
Background check	0.066 (0.029)**	0.012 (0.017)
Handgun Permit	−0.167 (0.070)**	−0.092 (0.036)**
Shall-issue CCW	0.044 (0.040)	0.013 (0.026)
May-issue CCW	0.025 (0.046)	0.014 (0.026)
Gun suicide		
Waiting period	−0.083 (0.031)***	−0.066 (0.019)***
Background check	0.064 (0.034)*	0.015 (0.023)
Handgun permit	−0.196 (0.078)**	−0.101 (0.037)***
Shall-issue CCW	0.007 (0.048)	0.008 (0.031)
May-issue CCW	−0.029 (0.063)	−0.012 (0.039)
Non-gun suicide		
Waiting period	−0.021 (0.047)	−0.001 (0.030)
Background check	0.119 (0.050)**	0.062 (0.030)**
Handgun permit	−0.156 (0.062)**	−0.059 (0.040)
Shall-issue CCW	0.176 (0.049)***	0.085 (0.028)***
May-issue CCW	0.152 (0.054)***	0.093 (0.027)***

Coefficients estimate the effect of waiting periods and background checks on the number of deaths per 100,000 adult residents. Models mirror those of Table 1. Model 1 includes only the policy variables shown. Model 2 follows the specification of Ludwig and Cook (8) and uses fewer years of data due to missing control variables in earlier years. SEs, shown in parentheses, are clustered by state. * $P < 0.10$; ** $P < 0.05$; *** $P < 0.01$. CCW, carrying of a concealed weapon.

Table S7. Alternative specifications for the effect of handgun waiting periods and background checks on violence from 1970 to 2014: Linear rate

Type of violence	1970–2014		1977–2014	
	(1)	(2)	(3)	(4)
All homicide				
Waiting period	–1.372 (0.772)*	–1.332 (0.790)*	–1.138 (0.477)**	
Background check		–0.190 (1.046)	–0.412 (0.960)	
Gun homicide				
Waiting period	–1.185 (0.627)*	–1.054 (0.686)	–1.010 (0.412)**	
Background check		–0.627 (0.806)	–0.398 (0.791)	
Non-gun homicide				
Waiting period	–0.187 (0.186)	–0.278 (0.191)	–0.129 (0.131)	
Background check		0.436 (0.324)	–0.014 (0.219)	
All suicide				
Waiting period	–0.906 (0.325)***	–1.238 (0.391)***	–0.459 (0.167)***	
Background check		1.600 (1.157)	0.070 (0.328)	
Gun suicide				
Waiting period	–0.882 (0.277)***	–0.912 (0.327)***	–0.533 (0.203)**	
Background check		0.143 (0.669)	–0.453 (0.338)	
Non-gun suicide				
Waiting period	–0.024 (0.222)	–0.326 (0.357)	0.073 (0.174)	
Background check		1.458 (0.615)**	0.524 (0.189)***	

Coefficients estimate the effect of waiting periods and background checks on the number of deaths per 100,000 adult residents. All models include state and year fixed effects and mirror those of Table 1. Model 3 uses fewer years of data due to missing control variables in earlier years. The analysis covering 1970–2014 includes 2,295 state-years; the analysis with control variables covering 1977–2014 includes 1,938 state-years. SEs, shown in parentheses, are clustered by state. * $P < 0.10$; ** $P < 0.05$; *** $P < 0.01$.

Table S8. Alternative specifications for the effect of handgun waiting periods and background checks on violence from 1970 to 2014: Poisson

Type of violence	1970–2014		1977–2014	
	(1)	(2)	(3)	(4)
All homicide				
Waiting period	–0.153 (0.049)***	–0.155 (0.050)***	–0.125 (0.051)**	
Background check		0.007 (0.076)	–0.002 (0.084)	
Gun homicide				
Waiting period	–0.209 (0.064)***	–0.198 (0.072)***	–0.177 (0.074)**	
Background check		–0.039 (0.094)	–0.007 (0.112)	
Non-gun homicide				
Waiting period	–0.031 (0.046)	–0.060 (0.050)	–0.012 (0.036)	
Background check		0.100 (0.072)	0.001 (0.055)	
All suicide				
Waiting period	–0.047 (0.019)**	–0.076 (0.023)***	–0.032 (0.010)***	
Background check		0.127 (0.070)*	0.032 (0.021)	
Gun suicide				
Waiting period	–0.089 (0.026)***	–0.116 (0.030)***	–0.075 (0.017)***	
Background check		0.111 (0.075)	0.032 (0.030)	
Non-gun suicide				
Waiting period	–0.010 (0.031)	–0.053 (0.053)	0.001 (0.032)	
Background check		0.207 (0.078)***	0.088 (0.031)***	

Coefficients are based on a Poisson model for the count of deaths using adult population as the exposure variable. All models include state and year fixed effects and mirror those of Table 1. Model 3 uses fewer years of data due to missing control variables in earlier years. The analysis covering 1970–2014 includes 2,295 state-years; the analysis with control variables covering 1977–2014 includes 1,938 state-years. SEs, shown in parentheses, are clustered by state. * $P < 0.10$; ** $P < 0.05$; *** $P < 0.01$.

Table S9. Unweighted estimates of the effects of handgun waiting periods and background checks on violence: Full sample period

Type of violence	1970–2014		1977–2014
	(1)	(2)	(3)
All homicide			
Waiting period	–0.007 (0.050)	–0.012 (0.052)	–0.047 (0.051)
Background check		0.018 (0.047)	0.022 (0.050)
Gun homicide			
Waiting period	–0.042 (0.060)	–0.029 (0.066)	–0.067 (0.066)
Background check		–0.049 (0.068)	0.011 (0.068)
Non-gun homicide			
Waiting period	0.055 (0.049)	0.020 (0.053)	–0.003 (0.044)
Background check		0.134 (0.049)***	0.039 (0.047)
All suicide			
Waiting period	–0.020 (0.017)	–0.045 (0.017)**	–0.028 (0.012)**
Background check		0.097 (0.029)***	0.032 (0.018)*
Gun suicide			
Waiting period	–0.044 (0.023)*	–0.070 (0.021)***	–0.063 (0.018)***
Background check		0.098 (0.032)***	0.051 (0.023)**
Non-gun suicide			
Waiting period	–0.016 (0.034)	–0.064 (0.041)	–0.029 (0.029)
Background check		0.186 (0.044)***	0.087 (0.032)***

This table mirrors Table 1, but models are not population-weighted. * $P < 0.10$; ** $P < 0.05$; *** $P < 0.01$.

Table S10. Unweighted estimates of the effects of handgun waiting periods and background checks on violence: Brady period

Type of violence	Brady period, 1990–1998		
	(1)	(2)	(3)
All homicide			
Waiting period	–0.047 (0.033)	–0.048 (0.035)	–0.012 (0.040)
Background check		0.003 (0.035)	–0.019 (0.043)
Gun homicide			
Waiting period	–0.081 (0.044)*	–0.070 (0.048)	–0.015 (0.051)
Background check		–0.032 (0.053)	–0.045 (0.065)
Non-gun homicide			
Waiting period	0.005 (0.034)	–0.006 (0.039)	0.009 (0.039)
Background check		0.033 (0.037)	–0.012 (0.038)
All suicide			
Waiting period	0.018 (0.016)	0.023 (0.017)	0.008 (0.017)
Background check		–0.014 (0.022)	0.000 (0.014)
Gun suicide			
Waiting period	–0.019 (0.019)	–0.019 (0.023)	–0.010 (0.019)
Background check		–0.000 (0.026)	–0.017 (0.017)
Non-gun suicide			
Waiting period	0.040 (0.019)**	0.035 (0.020)*	0.015 (0.022)
Background check		0.013 (0.024)	0.036 (0.023)

This table mirrors Table 1, but models are not population-weighted. * $P < 0.10$; ** $P < 0.05$.

Table S11. Effects of handgun waiting periods on violence, 1970–2014

Variable	Homicides			Suicides		
	All (1)	Gun (2)	Non-gun (3)	All (4)	Gun (5)	Non-gun (6)
Waiting period	-0.132** (0.050)	-0.186** (0.071)	-0.035 (0.037)	-0.024** (0.011)	-0.074*** (0.017)	-0.006 (0.033)
Background check	0.025 (0.081)	0.022 (0.107)	0.036 (0.057)	0.023 (0.020)	0.029 (0.028)	0.084** (0.031)
Alcohol consumption	0.155** (0.065)	0.142* (0.075)	0.198*** (0.071)	0.144*** (0.039)	0.147*** (0.045)	0.128*** (0.045)
Poverty	-0.004 (0.006)	-0.006 (0.007)	-0.003 (0.005)	0.001 (0.002)	0.002 (0.002)	-0.005 (0.004)
Income	-0.002 (0.011)	0.003 (0.013)	-0.003 (0.011)	-0.009*** (0.003)	-0.011** (0.004)	-0.021*** (0.005)
Urban	0.002 (0.006)	0.001 (0.007)	0.003 (0.006)	0.003 (0.003)	0.002 (0.003)	0.009** (0.004)
Black	0.035* (0.020)	0.040* (0.023)	0.022 (0.016)	0.004 (0.009)	0.024* (0.012)	-0.011 (0.010)
Age under 14 y	0.033 (0.038)	0.057 (0.055)	0.005 (0.027)	-0.003 (0.015)	0.002 (0.017)	0.013 (0.021)
Age 15–17 y	-0.136** (0.062)	-0.106 (0.077)	-0.145* (0.073)	-0.084** (0.035)	-0.171*** (0.040)	-0.068 (0.052)
Age 18–24 y	0.015 (0.046)	0.017 (0.061)	0.014 (0.047)	0.002 (0.020)	0.037* (0.021)	0.010 (0.025)
Age 25–34 y	-0.035 (0.034)	-0.038 (0.045)	-0.015 (0.029)	0.016 (0.019)	0.013 (0.022)	0.041 (0.026)
Age 35–44 y	-0.008 (0.051)	-0.038 (0.063)	0.044 (0.047)	-0.009 (0.017)	0.005 (0.023)	0.024 (0.023)
Age 45–54 y	0.056 (0.034)	0.107** (0.046)	0.009 (0.029)	0.037** (0.016)	0.027 (0.020)	0.016 (0.028)
Age 55–64 y	0.029 (0.061)	-0.025 (0.085)	0.126*** (0.044)	0.020 (0.022)	0.022 (0.033)	0.090** (0.036)
Observations	1,938	1,936	1,937	1,938	1,938	1,938
Adjusted R^2	0.91	0.90	0.85	0.92	0.97	0.84

This table reports coefficients for all variables included in model 3 of Table 1. The dependent variable is the natural logarithm of adult deaths (21+) per 100,000 adult residents. The observation count for gun homicides is two less than the full sample count because North Dakota had no adult gun homicides in 2008 and Vermont had no adult gun homicides in 2009. The observation count for non-gun homicides is one less than the full sample count because North Dakota had no adult non-gun homicides in 2003. All models include state and year fixed effects. SEs, shown in parentheses, are clustered by state. * $P < 0.10$; ** $P < 0.05$; *** $P < 0.01$.