Firearm-Related Laws in All 50 US States, 1991–2016

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Objectives. To describe a new database containing detailed annual information on firearm-related laws in place in each of the 50 US states from 1991 to 2016 and to summarize key trends in firearm-related laws during this time period.

Methods. Using Thomson Reuters Westlaw data to access historical state statutes and session laws, we developed a database indicating the presence or absence of each of 133 provisions of firearm laws in each state over the 26-year period. These provisions covered 14 aspects of state policies, including regulation of the process by which firearm transfers take place, ammunition, firearm possession, firearm storage, firearm trafficking, and liability of firearm manufacturers.

Results. An examination of trends in state firearm laws via this database revealed that although the number of laws nearly doubled during the study period, there was substantial heterogeneity across states, leading to a widening disparity in the number of firearm laws.

Conclusions. This database can help advance firearm policy research by providing 26 years of comprehensive policy data that will allow longitudinal panel study designs that minimize the limitations present in many previous studies. (*Am J Public Health*. 2017;107: 1122–1129. doi:10.2105/AJPH.2017.303701)



See also Galea and Vaughan, p. 1030.

To reduce and prevent firearm-related violence, many states have enacted laws regulating the sale, purchase, possession, and storage of firearms. There is a need to evaluate the impact of these laws on firearm violence to understand which laws are effective in informing policy decisions.

Because of the substantial variation in firearm legislation at the state level, the use of panel regression methods to model differences in violent outcomes between states with and without a particular type of law over time has been the most common evaluation approach. 1,2 Given the enormous set of factors that contribute to violence and the considerable variation in firearm laws across states, this approach is more likely to yield meaningful results if it can draw data from a large number of states over a substantial period of time. In particular, it is essential to have a consistent panel of legislative data over a long period of time to have enough observations (i.e., statistical power) to detect a significant effect of a state law if one exists

and to account for the possibility that it may take time for laws to have an impact. However, we are not aware of any recent published or publicly available database that provides comprehensive information on a wide range of state firearm laws over an extended period of time.

Although existing state firearm law data sources have made substantial contributions to research, each of these sources has significant limitations. Vernick and Hepburn published a summary of state firearm laws that included 16 policy provisions,³ but that data set concluded at 1999 and, to the best of our knowledge, has not been updated to reflect

the many state firearm laws enacted since then. The Brady Campaign to Prevent Gun Violence and the Law Center to Prevent Gun Violence publish an annual scorecard of state firearm legislation that includes 38 different policy provisions. 4 However, this scorecard includes information only from 2007 onward, and the coded provisions are not consistent over the entire period. The Law Center to Prevent Gun Violence also provides detailed information on a wide range of gun laws in all 50 states. 5 However, only data for recent years are provided; there is no panel of historical data. The National Rifle Association's Institute for Legislative Action provides detailed information but only on current state gun laws.6

Perhaps the greatest limitation of the existing literature is that, to the best of our knowledge, no prior study has established clearly defined criteria to explain exactly what is meant by each policy provision. Specifically, previous studies have not clearly articulated the applicability of each statute. For example, is a state considered to have a waiting period for firearms purchase if its law applies to sales from licensed dealers but not private sellers? What if it applies only to handguns and not long guns? What if there is an exemption for individuals who hold concealed carry permits or handgun licenses?

State firearm laws are complicated; there are many nuances, exceptions, and exemptions, meaning that a law might apply to some people or in some situations in one state but may not apply to the same people or the same

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situation in another state. Without a clear set of definitions regarding the applicability of each law provision, it is not clear exactly what is meant by the "presence" or "absence" of a firearm law. Therefore, 2 states may be coded as having the same firearm law, but that law might apply in different situations in the 2 states. Alcorn and Burris recently noted that a major weakness in many evaluations of firearm law effectiveness is the "imprecise and opaque measurement of legal variables." They explained that "laws are treated as simple binary variables, ignoring substantial variation in the operative terms of laws of the same type." **S(p233)**

In a systematic review of research on the effectiveness of firearms laws, the Task Force on Community Preventive Services, an independent group of prevention experts, identified weaknesses in the classification of gun laws as a critical research issue. The task force argued that

misclassification of state laws and their dates of implementation hinders firearms law research. Some differences among states in the effects of laws may be attributable to differences among states in provisions of the law, such as their requirements, penalties, or the presence of other laws. 9(p59)

To address these gaps in the field, we undertook a project to produce the most comprehensive and extensive database of state firearm laws, coding 133 different provisions in 14 categories and covering the 26-year period 1991 to 2016. Here we describe the procedures used to create the database, summarize the major findings of our research, and discuss the implications and potential contribution of this database to the field of firearm violence prevention research.

METHODS

We developed a panel database consisting of dichotomous variables (0 vs 1) to indicate the presence or absence of each of 133 firearm-related law provisions in each of the 50 states over the 26-year study period. These provisions covered 14 aspects of state policies:

- 1. regulation of gun dealers;
- age, training, and permitting requirements for the purchase of guns;

- 3. laws that prohibit gun possession by individuals at high risk because of a history of mental health problems, drug or alcohol misuse, or criminal activity;
- 4. background checks on private sales;
- 5. regulation of ammunition sales;
- 6. regulation of gun possession;
- 7. regulation of concealed carrying;
- 8. restrictions on assault weapons and largecapacity ammunition magazines;
- gun storage and child access prevention laws;
- 10. laws to address gun trafficking;
- 11. "stand your ground" laws;
- 12. state preemption of local gun regulation;
- 13. state gun manufacturer immunity statutes; and
- 14. laws aimed at preventing individuals with a history of domestic violence from obtaining or keeping guns.

A complete list of the coded policy provisions is provided in Table 1. To the best of our knowledge, this is the largest and most extensive panel of state firearm laws ever assembled.

Data Sources

We used 2 primary sources in developing our database: the Thomson Reuters Westlaw database and the Everytown for Gun Safety database. We used the Thomson Reuters Westlaw database of historical state statutes and session laws to identify state laws regarding firearms and to code 100 law provisions (Table 1). Thomson Reuters Westlaw is the leading and most comprehensive online legal resource, widely used by law students, attorneys, and legal researchers. We considered using 2 alternative sources (Hein Online and LexisNexis) but chose Thomson Reuters Westlaw because we found it to be best suited for efficient searching of historical state statutes.

Everytown for Gun Safety (New York, NY), in collaboration with Legal Science LLC (Philadelphia, PA), compiled a database of a selection of state firearm statutes that covers the period 1991 to 2016. ¹⁰ Everytown for Gun Safety provided us access to this database, with which we coded an additional 33 provisions in 3 areas: (1) laws that define classes of people who are prohibited from possessing a gun, (2) procedures for obtaining

concealed carry permits and laws that define classes of people who are disqualified from carrying concealed weapons, and (3) laws aimed at preventing individuals with a history of domestic violence from obtaining or keeping guns. Using their research, we coded 33 different law provisions beyond the 100 provisions we independently coded through the Thomson Reuters Westlaw database, resulting in a total of 133 coded provisions (Table 1).

We also used 2 secondary sources. The first was the Bureau of Alcohol, Tobacco, Firearms, and Explosives' State Laws and Published Ordinances. We were able to obtain hard copies of this publication, which includes the full text of each state's firearm-related laws, for the years 2000, 2006, and 2010 to 2011. 11 We used this resource to identify the specific statutes (chapter and section numbers) for each law provision. Our other secondary source was the Law Center to Prevent Gun Violence, which has tracked a large number of state firearm policies since 2007.5 We used these data primarily to identify the current law provisions operative in each state and the statutes (chapter and section numbers) relevant to each provision.

Measures

To develop the list of law provisions to be coded, we relied heavily on previous descriptions of state firearm laws, primarily the work done by Vernick and Hepburn,³ the Law Center to Prevent Gun Violence and the Brady Campaign to Prevent Gun Violence,^{5,12} Everytown for Gun Safety,¹⁰ the Bureau of Justice Statistics,¹³ and the National Rifle Association.⁶ We included most of the law provisions that have been described or analyzed previously to provide consistency with the existing literature.

For each category of laws, we paid special attention to variations, nuances, and exemptions that could be expected to affect the effective implementation and enforcement of these laws. For example, in coding whether a state bans possession of handguns by people less than 21 years of age, we decided not to allow for any exception for possession with parental consent unless direct parental supervision was required because this would otherwise create a significant loophole that could undermine the effectiveness of the law.

TABLE 1—State Firearm Law Provisions Coded: All 50 US States, 1991–2016 (n = 133)

Category	Provisions
Dealer regulation (17 provisions)	Dealer license required for all sales, dealer license required for handgun sales, recordkeeping for all sales, recordkeeping for handgun sales, recordkeeping for all sales, recordkeeping for handgun sales, reporting of all sales, reporting of all sales, reporting of all sales for dealers, reporting of all sales for dealers, reporting of all sales for dealers, reporting of handgun sales for dealers, no required purging of sales records, no residential dealers allowed, mandatory store theft reporting, store security precautions, mandatory store inspections, liability for injuries if improper sale, no sale of junk guns
Buyer regulation (17 provisions)	Purchase permit required for all firearms, permit required for handguns, fingerprinting at purchase, training required, law enforcement involved in permitting, registration for all firearms, registration for handguns, registration through a recordkeeping requirement for handgun sales, age 21 y for all handgun purchases, age 18 y for all long gun purchases, age 21 y for dealer long gun purchases, age 21 y for dealer long gun purchases, age 21 y for all long gun purchases, age 21 y for dealer long gun purchases, age 21 y for dealers, waiting period for handgun purchases, 1 handgun per mo
Prohibitions on high-risk gun possession ^a (10 provisions)	Felony, involuntary inpatient commitment, involuntary outpatient commitment, determination by a court that individual is a danger to others (this is separate from a gun violence or risk-warrant restraining order), drug misdemeanor, alcohol treatment, alcoholism, violent misdemeanor punishable by less than 1 y (all firearms), violent misdemeanor punishable by less than 1 y (handguns), violent misdemeanor punishable by more than 1 y
Background checks (11 provisions)	Universal background checks for all sales, universal background checks for handgun sales, background checks for all gun show sales, background checks for long guns at gun shows, background check through permit requirement for all sales, background check through permit requirement for handgun sales, no purging of background check records, extension of 3-d limit, explicit requirement for a check of state mental health records, state conducts own check for all sales, state conducts own check for handguns
Ammunition regulation (7 provisions)	License required to sell ammunition, recordkeeping for ammunition sales, permit required for ammunition purchase, age 18 y to purchase ammunition, age 21 y to purchase handgun ammunition, background checks for ammunition purchase, ammunition sales prohibited to same categories as firearm sales
Possession regulation (12 provisions)	Age 21 y for handgun possession, age 18 y for long gun possession, age 21 y for long gun possession, gun violence restraining orders initiated by family members, gun violence restraining orders initiated by law enforcement, no possession of concealed weapons in schools, no open possession on college campuses, no possession of open or concealed weapons on college campuses, no open carry of handguns without a permit, no open carry of long guns, no open carry of long guns, no open carry of long guns without a permit
Concealed carry permitting (7 provisions)	Permit required for concealed carry, "may issue" state, must show need for concealed carry, a background checks required, background checks must include an NICS (National Instant Criminal Background Check System) check, background checks for permit renewal, revocation of permit if no longer allowed to possess
Assault weapons and large-capacity ammunition magazines (8 provisions)	Assault weapon ban, one-feature test, list of banned weapons, existing weapons must be registered, no transfer of existing weapons, large-capacity ammunition magazine ban, 10-round limit, must surrender preowned magazines
Child safety (11 provisions)	All guns must be sold with a lock, all guns from dealers must be sold with a lock, guns must be kept locked, standards for gun locks, liability for negligent storage, liability if child accesses gun, liability if child uses gun, liability if gun is unloaded, minor defined as younger than age 14 y, minor defined as younger than age 16 y, minor defined as younger than age 18 y
Gun trafficking (7 provisions)	No purchase of firearms with intent to resell without a background check, no purchase of firearms with intent to transfer to a prohibited person, no purchase of handguns with intent to transfer to a prohibited person, no straw purchase of firearms allowed, no straw purchase of handguns allowed, ballistic identification using automated ballistic imaging or a requirement for microstamping of handguns, study of personalized gun technology
Stand your ground laws (1 provision)	No stand your ground law in place
Preemption (3 provisions)	No preemption of local firearm regulation in place, no broad preemption in place, no complete preemption in place
Immunity statutes (1 provision)	No statutory limitation of gun manufacturer liability or prohibition on local lawsuits against gun manufacturers
Domestic violence–related laws ^a (21 provisions)	Misdemeanor crime of domestic violence (MCDV) prohibiting, MCDV prohibiting for dating partner, MCDV offenders must surrender weapons, must surrender weapons with no conditions, must surrender weapons if dating partner, law enforcement authorized to remove weapons from MCDV offender, law enforcement required to remove weapons, firearms removed from scene of domestic violence incident, all firearms removed, domestic violence restraining order (DVRO) prohibiting, DVRO prohibiting for dating partner, temporary restraining order prohibiting for dating partner, surrender of weapons required for DVRO subjects, no conditions for surrender to be required, surrender applies to dating partners, surrender required for temporary orders, no conditions for surrender for temporary orders, surrender applies to dating partners, required removal of weapons from DVRO offenders, a stalking offense is prohibiting for gun possession

^aThese provisions (33 provisions) were taken from coding conducted by Everytown for Gun Safety. The remaining provisions were coded by the research team (100 provisions).

By contrast, exceptions for possession during adult-supervised hunting, sporting, and training activities did not lead to coding this provision as absent.

Coding Operative Terms of Laws

Laws are not always dichotomous, as there may be graded variations in their strength. We attempted to account for this by separately

coding the operative terms of each law. For example, "child access prevention" statutes—which make parents liable for negligent storage of firearms—have previously been

coded as present or absent. However, the strength of these laws varies according to the type of event that triggers parental liability. Some states make a parent liable for negligent storage regardless of whether the child actually accesses the gun, others impose liability only if the child gains access to the gun, and still others impose liability only if a child actually uses the gun. Because we coded each of these variations separately, our dichotomous coding can easily be converted into a scale that reflects levels of increasing stringency of these laws.

Coding Procedures

To ensure consistency in the coding of legal provisions, M. S. coded laws in each state. However, we developed an extensive series of validity checks to ensure the accuracy of this coding.

First, the original coding was cross validated by a second individual. For this project, a team of 20 graduate public health students was trained to perform the coding in a pair of 150-minute training sessions. Every state's laws were investigated by at least 2 coders (M. S. and another coder). Any discrepancies were resolved by mutual agreement after reexamination of the original statute text.

Second, as a check on the accuracy of our coding, we compared our database with all previous databases of which we are aware. ^{4–6,10,12} We also cross checked our coding with all previous published books and articles we could find that provided information on state gun law provisions, including

- a summary of state firearm laws covering the period 1970 to 1999 prepared by Vernick and Hepburn³;
- 2. reference tables produced by the Bureau of Alcohol, Tobacco, Firearms, and Explosives for the years 2000, 2008, and 2010 to 2011¹¹;
- 3. reports on state firearm laws produced by the Bureau of Justice Statistics for the years 1995 through 2005¹³;
- detailed summaries of the implementation date of "shall issue" (nondiscretionary) concealed carry permitting laws prepared by Rubin and Dezhhakhsh, ¹⁴ Wegenka, ¹⁵ Rosengart et al., ¹⁶ and Ayres and Donohue¹⁷;

- detailed summaries of the implementation date of stand your ground laws by McClellan and Tekin, ¹⁸ Cheng and Hoekstra, ¹⁹ and Mayors Against Illegal Guns²⁰: and
- other published reports that have summarized state gun law provisions of any kind. ^{21–35}

For every discrepancy, we reexamined relevant historical state statutes and session laws, and M. S. made a final determination of the coding on the basis of close adherence to the codebook.

In coding law provisions, a 1 indicated the presence of a law and a 0 indicated its absence. Provisions intended solely to reduce firearm injuries were always coded with a 1. Conversely, provisions that were primarily intended to expand the manner and space in which firearms can be used or minimize the liability of gun manufacturers (e.g., immunity statutes, stand your ground laws) were coded as 0, and the absence of such laws was coded as 1. This allowed us to sum the number of provisions present as an indication of the overall number of laws solely intended to reduce firearm injury. (The full database and a codebook are available online at http://statefirearmlaws.org.)

RESULTS

There was more than an order of magnitude difference in the number of firearm laws across the 50 states (Table 2). For example, as of 2016, 3 states (AK, ID, and MT) had enacted only 4 of the 133 law provisions, whereas California had enacted 104 of the provisions, Massachusetts had enacted 100, and Connecticut had enacted 89.

There was also great variation in trends across states in the number of firearm laws over time (Table 2). Whereas some states substantially increased the number of their law provisions (e.g., California went from 59 provisions to 104 and Connecticut from 27 to 89), others reduced the number of their law provisions (e.g., SC went from 21 to 12 and AK from 10 to 4).

The disparity in firearm law adoption was even larger between states with a greater number of firearm laws at baseline (Figure 1). The average increase was 27 in the 10 states

TABLE 2—Trend in Total Number of State Firearms Law Provisions: United States, 1991-2016

Total	No.	of	Firearm	Law	
Provisions					

	Provisions		
State	1991	2016	Change, 1991–2016
California	58	104	+46
Massachusetts	55	100	+45
New Jersey	46	67	+21
Illinois	41	64	+23
Rhode Island	39	43	+4
Hawaii	38	78	+40
New York	35	75	+40
Connecticut	27	89	+62
Michigan	24	21	-3
South Carolina	21	12	-9
North Carolina	19	30	+11
Florida	18	21	+3
lowa	18	25	+7
Nebraska	18	22	+4
Ohio	18	16	-2
Tennessee	18	22	+4
Pennsylvania	17	36	+19
Maryland	17	64	+47
Wisconsin	16	23	+7
Missouri	16	7	-9
Oregon	16	35	+19
Alabama	15	10	-5
Minnesota	15	41	+26
Arkansas	14	10	-4
Kansas	13	7	-6
Texas	13	18	+5
North Dakota	13	14	+1
Virginia	12	13	+1
Georgia	12	6	-6
Utah	12	11	-1
Arizona	12	11	-1
West Virginia	11	21	+10
Delaware	11	39	+28
Alaska	10	4	-6
Indiana	10	12	+2
Louisiana	10	12	+2
Oklahoma	10	9	-1

Continued

TABLE 2—Continued

	Total No. of Firearm Law Provisions			
State	1991	2016	Change, 1991–2016	
Washington	10	43	+33	
New Mexico	10	10	0	
Maine	9	12	+3	
Colorado	9	30	+21	
Nevada	8	15	+7	
Mississippi	8	5	-3	
Kentucky	8	7	-1	
New Hampshire	7	10	+3	
Wyoming	7	9	+2	
South Dakota	6	5	-1	
Idaho	5	4	-1	
Montana	3	4	+1	
Vermont	3	6	+3	
Median, all states	13.0	15.5	+2.5	

Note. The total possible number of law provisions is 133.

with more than 20 law provisions in 1991, as compared with an average increase of less than 1 in the 11 states with fewer than 10 provisions in 1991. Thus, disparities between the numbers of firearm laws across states increased markedly.

Five noticeable trends in the enactment of state firearm laws intended to protect gun rights or gun manufacturers were evident (Figure 2). The first was the diffusion of stand your ground laws, which allow the use of a gun for self-defense without a duty to retreat if people are in a place where they have a right to be. The first stand your ground law was enacted in 1994, but there was a sharp increase in the passage of these laws from 2005, when only 2 such laws were in place, to 2016, when 24 states had these laws. The second trend was the weakening of concealed carry permit laws through the removal of discretion by law enforcement in approving such permits (lack of discretion is referred to as a "shall issue" law), a pattern that began in 1994 and continued throughout the study period. In 1993, there were just 15 states with shall issue laws and only 1 that allowed concealed carry of guns without a permit; in 2016, however, there were 32 shall issue states and an

additional 9 allowing concealed carry without a permit.

A third trend was the adoption of legislation that preempted local governments from enacting their own firearm laws. There were 33 states with some form of preemption in place in 1991, as compared with 45 in 2016. A fourth trend was the enactment of gun industry immunity laws limiting manufacturer liability by preventing potential litigation. There were 7 immunity statutes in place in 1991 but 33 in 2016. The fifth trend—a more recent onewas a weakening of state laws that prohibit concealed carry weapons in schools or on college campuses. The number of states prohibiting concealed carry in schools dropped from 41 in 2009 to 33 in 2016. The number of states prohibiting concealed carry on college campuses decreased from 16 in 2003 to 12 in 2016.

The greatest increases in the number of states that enacted laws occurred in the areas of firearm laws related to domestic violence, background checks to obtain concealed carry permits, prohibition of firearm possession by felons, and prohibition of firearm possession by people who have been involuntarily committed for inpatient mental health treatment.

DISCUSSION

The most important contribution of our new database is the creation of easy access for researchers to a consistent panel of detailed information on specific provisions of firearm laws across all 50 states over a 26-year period, including data for the most recent full year. In addition, detailed descriptions of the criteria used to code each provision have been provided so that there is transparency in how various law exemptions, exceptions, and other nuances were addressed. The availability of this database will allow for better assessments of the potential impact of state firearm laws on firearm violence.

More specifically, the availability of this database overcomes several limitations of prior evaluation research. One limitation of much prior research is that those constructing indices of firearm policies either assumed that all types of policies are equally effective or

created these indices by arbitrarily weighting different types of policies solely on the basis of subjective assessments of importance. The Brady scorecard, which has been relied upon in previous studies, is such an example. However, it is also possible that some policies are ineffective and that combining all types of policies in a single index might dilute the impact of the effective policies. It is also possible that specific combinations of policies are required to influence rates of firearm violence. Because we have provided detailed information on a wide range of policies, researchers can now examine the effects of individual and multiple combinations of policies.

Another limitation in the existing literature is the failure to account for other state gun laws implemented during the same period as the law under study. The independent effects of a particular law provision cannot be determined without accounting for the status of other law changes. We now have data on 14 different categories of firearm laws over a 26-year period, allowing the most extensive consideration to date of the potential confounding effects of simultaneously enacted law provisions and of the impact of laws in surrounding states.

Perhaps the most important contribution of this new database is the use of a systematic procedure that considers the scope of application of each law, including exceptions and exemptions, thereby minimizing imprecise and opaque measurement of legal variables.⁸

Our initial examination of trends in state firearm laws using this database revealed that although the number of laws has increased during the past 26 years, the increase has not been consistent across states, and some states have even decreased the number of their laws, leading to an increasing disparity in the number of firearm laws across states. The reduction in the number of firearm laws in these states has been driven primarily by the adoption of laws that either promote the use of firearms for self-defense (e.g., stand your ground laws, elimination of the requirement to obtain a permit to carry concealed weapons, and allowing concealed weapons on college campuses or in elementary schools) or protect the firearms industry from litigation (e.g., immunity statutes).

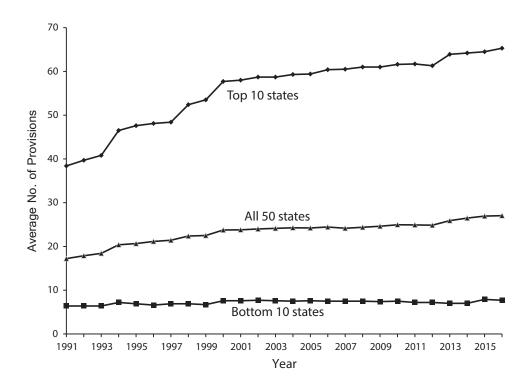


FIGURE 1—Average Number of Firearm Law Provisions by Year, Top 10 vs Bottom 10 States in Terms of Number of Firearm Laws in 1991: All 50 United States, 1991–2016

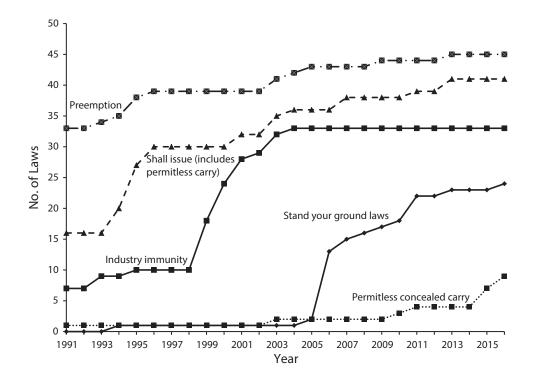


FIGURE 2—Laws Intended to Protect Gun Rights or Gun Manufacturers, Total Number by Type: All 50 US States, 1991–2016

Several limitations of our study deserve mention. First, it should not be assumed that our decision to code a particular law as present implies that this law is effective in protecting the public's health. Our coding indicates legislative intent to reduce firearm deaths and injuries but not necessarily effectiveness in doing so. Similarly, our reporting of the total number of law provisions in place in a state should not be interpreted as a quantitative, linear measure of the strength of a state's firearm laws. There may be variations in the relative effectiveness of various laws, so any scale that simply sums the total number of law provisions is not necessarily an indication of the public health value of these laws. We have reported the total number of law provisions simply as a way to summarize the data, not with any intention of this number representing a valid scale of law strength or value.

Second, we were unable to code every possible firearm law category or every operative provision within these categories because of time, personnel, and funding limitations. The major categories of laws that we did not code were (1) laws requiring state agencies to report involuntary commitment records to federal databases; (2) laws specifying places (other than schools and colleges) where concealed carry is permitted, such as bars, restaurants, and public buildings; and (3) reciprocity agreements to accept other states' concealed carry permits. We hope to include these categories in a future version of the database.

Third, this database captures only state statutes. It does not capture information on state administrative regulations, judicial proceedings and practices, enforcement of the laws, or penalties for breaking the laws. Differences between states in penalties for breaking firearm-related laws might have a substantial impact on outcomes.

Despite these limitations, we believe that this database will help advance firearm policy research by allowing more rigorous longitudinal designs. We hope it will also spur further efforts to monitor and analyze state firearm laws, including efforts that build upon, expand, or challenge our work. AJPH

CONTRIBUTORS

M. Siegel and M. Pahn conceptualized the study, led the data analysis and writing, and were the principal authors of the article. Z. Xuan, C. S. Ross, S. Galea, B. Kalesan, E. Fleegler, and K. A. Goss assisted with the study design,

analytic plan, interpretation of data, and revisions of the article.

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M. S. used data derived from the Thomson Reuters Westlaw legislative database to code 100 of the 133 law provisions, with funding from the Robert Wood Johnson Foundation (grant 73337). The remaining 33 provisions were coded via a database created by Everytown for Gun Safety and Legal Science LLC (http://everytownresearch.org/gunlawnavigator). These data were shared in accordance with the Creative Commons Attribution 4.0 International License. No changes were made to the original coding, but the data were adapted for use in this database. See the online codebook (http://statefirearmlaws.org) for information on which provisions were coded by which source.

Note. The views expressed here do not necessarily reflect the views of the Robert Wood Johnson Foundation

HUMAN PARTICIPANT PROTECTION

No protocol approval was needed for this study because only secondary data were used.

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