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# Assessing Variations in Sexual Orientation- and Gender Identity-Related U.S. State Laws for Sexual and Gender Minority Health Research and Action, 1996–2016

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**Abstract**

***Purpose:*** We developed a multiyear database of sexual orientation- and gender identity-related U.S. state laws to advance sexual and gender minority (SGM) health research and practice and assessed variability in U.S. state laws from 1996 through 2016 across all U.S. states and D.C.

***Methods:*** Between 2014 and 2016, a multidisciplinary group of SGM health researchers and legal experts used secondary and primary legal sources and policy surveillance methods to systematically develop a state-level legal database of 30 sexual orientation- and gender identity-related U.S. state laws in 9 legal domains from 1996 through 2016. We calculated descriptive statistics and created maps to observe the distribution of these laws over both time and space.

***Results:*** Although progress has occurred in some domains, such as same-sex marriage, adoption, and employment discrimination, significant challenges to SGM rights remain, especially with regard to HIV criminalization, transgender rights, and discrimination in health care settings. Further, notable variation exists in the presence of protective lesbian, gay, bisexual, transgender, queer (LGBTQ) state laws across U.S. states and D.C.

***Conclusion:*** Efforts to repeal harmful U.S. state laws are needed, as are new laws, policies, regulations, practices, and norms that advance social justice and health equity for all SGM people.

**Keywords:** gender identity, gender minorities, law, sexual orientation, sexual minorities, structural stigma

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## Introduction

Lesbian, gay, bisexual, transgender, queer (LGBTQ), and other sexual and gender minority (SGM) populations experience pronounced physical and mental health inequities relative to their heterosexual and cisgender counterparts throughout the life course.[1] Researchers have attributed sexual orientation- and gender identity-related health inequities to anti-LGBTQ stigma at the individual, interpersonal, cultural, and structural levels—including anticipated rejection, negative stereotypes, social exclusion, and covert and overt discrimination toward SGM individuals.[1–3]

In recent years, scholars have emphasized the role of structural factors—namely societal-level laws, policies, practices, norms, and conditions that influence groups' and individuals' access to social, economic, political, and health care resources and exposure to physical and psychosocial harms—in shaping sexual orientation and gender identity inequities in health.[1,3,4] In particular, scholars have identified anti-LGBTQ structural stigma—including laws, policies, rules, regulations, norms, and practices at the federal, state, county, city, and institutional levels that undermine access to societal resources and increase exposure to various harms among LGBTQ people—as a key driver of health and well-being among SGM populations.[1,5]

Of note, public health researchers have increasingly examined the impact of state laws on the health of LGBTQ people in the United States (U.S.).[5] Studies have largely focused on ascertaining how state same-sex marriage laws and, to a lesser extent, state hate crime and sexual orientation-related nondiscrimination laws influence mental health outcomes among lesbian, gay, and bisexual (LGB) men, women, and adolescents.[5–8] For example, Raifman et al. found that state same-sex marriage laws were associated with fewer suicide attempts among LGB adolescents.[9] Similarly, investigators also found that LGB women and men living in states with laws that protect sexual minority people from hate crimes and sexual orientation-related employment discrimination had fewer psychiatric disorders compared with those in states without these protections.[6]

Although most studies have focused on the impact of sexual orientation-related state laws on LGB peoples' mental health, some also pertain to their impact on physical and behavioral health outcomes among sexual minority populations. For example, Charlton et al. found that lesbian and bisexual (but not heterosexual) women living in states with lower compared with higher levels of anti-LGB structural stigma—measured in part by the presence of sexual orientation-related nondiscrimination laws—were significantly less likely to have a sexually transmitted infection.[10] In addition, a recent study found that state laws that discriminate against LGBTQ people were positively associated with anxiety symptoms and heavy drinking, and negatively associated with HIV testing, among Black and White sexual minority men.[11]

In contrast to this small but growing literature, research examining how gender identity-related state laws shape health outcomes among transgender and other gender minority (e.g., nonbinary, genderqueer, gender fluid) people is even more limited. However, existing studies on this topic indicate that state laws that are protective of gender minority people are associated with better health and reduced health care avoidance in these marginalized populations.[12–14] For example, in a recent study, McDowell et al. found that state health insurance policies that prohibit discrimination on the basis of gender identity were associated with lower levels of suicidality among gender minority individuals.[15]

Public health research that examines how state legal environments influence the health of LGBTQ and other SGM populations is critically important to understanding and addressing the structural determinants of SGM health.[5,16] Along with community mobilization, organizing, and advocacy, this research can help inform the repeal of state laws that harm SGM rights, health, and well-being.[1] Further, such research, along with critical scholarship in the social sciences and humanities and participatory methodologies that center the lived experiences of those who are multiply marginalized, can point us toward the development and implementation of new laws, policies, rules, regulations, social systems, institutional practices, and social norms that promote the collective rights and mental, physical, and social health and well-being of diverse groups of SGM people.[17,18]

However, public health research examining the effects of sexual orientation- and gender identity-related U.S. state laws on SGM health faces numerous challenges. First, most public health researchers lack the training, expertise, and resources to accurately measure the complicated, multifaceted, and constantly evolving landscape of sexual orientation- and gender identity-related state laws. Second, the public health researchers who have conducted studies on this topic have focused on a narrow range of sexual orientation-related state laws—namely same-sex marriage laws—to the exclusion of laws pertaining to other critically important legal and policy domains (e.g., education, employment, health care) or gender identity.

Third, most studies examining associations between LGBTQ state laws and SGM health have relied on cross-sectional study designs, which precludes the estimation of longitudinal relationships.[5,19,20] Indeed, although previous and ongoing efforts to collect data on LGBTQ state laws, such as those by the Movement Advancement Project,[21] Human Rights Campaign,[22] and Centers for Disease Control and Prevention,[23] exist, these data pertain to single years rather than the multiyear time periods required for longitudinal analyses that facilitate the estimation of causal effects across the life course.

Thus, research that examines how a broad range of not only sexual orientation- but also gender identity-related state laws impact the health of LGBTQ and other SGM populations over time using multiyear state-level legal data is urgently needed.[24] To advance research and practice on the impact of LGBTQ state laws on SGM health, a multidisciplinary group of SGM health researchers and legal experts systematically developed a comprehensive and detailed database of U.S. state laws related to both sexual orientation and gender identity spanning the course of two decades. This article describes the process of developing as well as the content of our newly created multiyear state-level database of LGBTQ U.S. state laws from 1996 through 2006.

## Methods

### *Legal domain identification and pilot feasibility study*

Between 2014 and 2016, a team of SGM health researchers and legal experts developed a multiyear database of

discriminatory and protective U.S. state laws pertaining to sexual orientation and gender identity. First, two members of the research team (J.W. and S.B.A.) and a third expert in SGM law and legal research methods carried out a pilot feasibility study to determine the scope, legal grounding, and protocol for creation of the database.

Using relevant legal textbooks and volumes on gender and sexuality law and justice,[25,26] the pilot feasibility study team identified, through discussion and by consensus, nine legal domains that explicitly and uniquely pertain to SGM people—namely relationship recognition, sexual orientation-related antidiscrimination, gender identity-related antidiscrimination, LGBTQ protections in school settings, hate crimes, prohibitions against sodomy, family formation and parenting, HIV/AIDS, and denial of services.

Next, the team identified ideal data sources and feasible data review and extraction protocols to document all laws in the nine legal domains in each U.S. state, updating annually from 1996 through 2016, the years for which individual-level health data of interest were available. Based on the pilot feasibility study, the team determined that Westlaw and LexisNexis would be the most productive data sources, and identified 30 U.S. state laws within the 9 legal domains using primary and secondary legal sources. Moreover, the team determined that it would be feasible for the team to document each law for each state and in each year in sufficient detail to allow for the creation of a comprehensive multiyear, state-level legal database suitable for longitudinal data analyses for public health research.

### *Policy surveillance process*

After the completion of the pilot feasibility study, three trained legal coders, supervised by two legal scholars focusing on SGM law and a leading SGM law expert, systematically collected detailed information on each of the 30 laws from 1996 through 2016 in all 50 U.S. states and D.C. using a codebook, coding protocol, and Excel data sheets.[27–29] The research team collaboratively and iteratively developed the codebook, which included a coding scheme consisting of mutually exclusive categories for the features of each law, and the coding protocol, which provided specific research questions and coding instructions for each law.

The protocol also detailed how to determine the key dates of a law (i.e., when the law was passed, when the law went into effect) and what effective date should be used to characterize the occurrence of a law in a given year. Of note, if the effective date of a law occurred in the first half of a year, it was counted as existing that year; if the effective date of a law was in the second half of a year, it was counted as existing in the next year. Using this process, a draft of the database was prepared in Excel, along with accompanying documents detailing full notations and legal citations.

### *Quality control*

Although we completed the database before the publication of the Temple University Law Atlas Project's guidelines for policy surveillance,[28,29] we engaged in several of the quality control processes outlined in the guidelines. Specifically, the three legal coders involved in the project underwent extensive standardized training by a leading SGM law expert. Moreover, the legal coders developed the codebook, coding protocol, and data sheets in collaboration with two legal scholars focusing on SGM law and under the guidance and oversight of a leading SGM legal expert. Further, the codebook, coding protocol, and data sheets were tested and refined using six states, which were independently coded by the three legal coders.

During this process, any coding discrepancy between the three coders was resolved through discussion and consensus, with adjudication by the legal expert. Coding proceeded independently by the three coders for all remaining states, with review by the legal expert and resolution of discrepancies through discussion and consensus. In addition, when coding differed between the three coders, the coders received additional training from the legal expert, and the codebook was revised and then reapplied accordingly to previously coded laws and states.[27,28] This study was not human subjects research, and so did not require Institutional Review Board review and approval per guidelines from the Tufts University Social, Behavioral, and Educational Research Institutional Review Board.

### *Assessing variability in state laws over time and space*

Once our database was finalized, a statistician and data manager reviewed the draft database to ensure data quality and its suitability for use in quantitative analyses for public health research and provided feedback for revisions to the legal scholars, who then revised the database as needed. A member of the research team (A.E.P.) then calculated descriptive statistics pertaining to the number and proportion of U.S. states with a given law in place in select years (i.e., 1996, 2001, 2006, 2011, and 2016) from 1996 through 2016 so that we could observe trends over time. Moreover, another member of our team (A.L.B.) created U.S. maps showing the geographic distribution of sexual orientation- and gender identity-related antidiscrimination laws in the aforementioned years so that we could observe variations over both time and space.

## Results

Table 1 presents the 30 sexual orientation- and gender identity-related U.S. state laws that were identified in the 9 legal domains identified *a priori* from 1996 through 2016 in the 50 U.S. states and D.C. These laws influence various aspects of LGBTQ people's public and private lives throughout the life course, including relationships, family formation, and discrimination in various social systems, including education, housing, employment, and health care.

As shown in Table 1, for the majority of U.S. state laws included in our database, there was both marked progress in and remaining challenges to LGBTQ legal rights during the study period. For example, in 1996, same-sex marriage was illegal in all 50 U.S. states and D.C. However, there was also no constitutional amendment prohibiting same-sex marriage licenses in any state. This changed in 1999 when Alaska added an amendment banning same-sex marriage to their constitution. By 2011, 28 states had passed a constitutional amendment prohibiting same-sex marriage (Table 1). In contrast, in 2016, every state legally recognized and performed same-sex marriages as a result of a 2015 Supreme Court ruling.[30] Yet, even when same-sex marriage protections became uniform across the country, only 16 states

Table 1. Distribution of U.S. State and District of Columbia Sexual Orientation- and Gender Identity-Related Laws by Legal Domain, Subdomain, and Year ($N$=51 Jurisdictions; $n$=30 Laws), 1996–2016

| *Legal domain* | *Subdomain* | *Law* | *1996 No. of states (%)* | *2001 No. of states (%)* | *2006 No. of states (%)* | *2011 No. of states (%)* | *2016 No. of states (%)* |
|---|---|---|---|---|---|---|---|
| Relationship recognition | Same-sex marriage licensed | Constitutional prohibition | 0 (0) | 2 (4) | 19 (37) | 28 (55) | 0 (0) |
| | | Prohibited by statute | 24 (47) | 36 (71) | 26 (51) | 14 (27) | 0 (0) |
| | | Not authorized by statute or court decision | 27 (53) | 13 (25) | 5 (10) | 3 (6) | 0 (0) |
| | | Legally recognized, but prohibitory statute or constitutional amendment remains on the books | 0 (0) | 0 (0) | 0 (0) | 1 (2) | 35 (69) |
| | | Recognized without any remaining prohibitory statute or constitutional amendment | 0 (0) | 0 (0) | 1 (2) | 5 (10) | 16 (31) |
| | Same-sex marriage recognized | Constitutional prohibition | 0 (0) | 2 (4) | 18 (35) | 26 (51) | 0 (0) |
| | | Prohibited by statute | 18 (35) | 32 (63) | 25 (49) | 14 (27) | 0 (0) |
| | | Not authorized by statute or court decision | 33 (65) | 17 (33) | 7 (14) | 1 (2) | 1 (2) |
| | | Legally recognized, but prohibitory statute or constitutional amendment remains on the books | 0 (0) | 0 (0) | 0 (0) | 1 (2) | 34 (67) |
| | | Recognized without any remaining prohibitory statute or constitutional amendment | 0 (0) | 0 (0) | 1 (2) | 9 (18) | 16 (31) |
| Sexual orientation-related antidiscrimination | Private employment discrimination | Protection | 10 (20) | 12 (24) | 18 (35) | 22 (43) | 23 (45) |
| | Housing discrimination | Protection | 9 (18) | 10 (20) | 17 (33) | 21 (41) | 23 (45) |
| | Public accommodation discrimination | Protection | 9 (18) | 10 (20) | 17 (33) | 22 (43) | 22 (43) |
| | Education discrimination | Protection | 5 (10) | 7 (14) | 11 (22) | 15 (29) | 17 (33) |
| | Credit discrimination | Protection | 7 (14) | 7 (14) | 13 (25) | 15 (29) | 15 (29) |
| | Health care discrimination | Protection | 6 (12) | 7 (14) | 9 (18) | 12 (24) | 12 (24) |
| Gender identity-related antidiscrimination | Private employment discrimination | Protection | 1 (2) | 1 (2) | 10 (20) | 15 (29) | 21 (41) |
| | Housing discrimination | Protection | 1 (2) | 1 (2) | 11 (22) | 15 (29) | 21 (41) |
| | Public accommodation discrimination | Protection | 1 (2) | 1 (2) | 10 (20) | 14 (27) | 19 (37) |
| | Education discrimination | Protection | 1 (2) | 1 (2) | 3 (6) | 8 (16) | 13 (25) |
| | Health care discrimination | Protection | 0 (0) | 0 (0) | 4 (8) | 6 (12) | 11 (22) |
| | Restroom access | State does not ban transgender people from using bathrooms consistent with their gender identity | 49 (96) | 49 (96) | 49 (96) | 49 (96) | 48 (94) |
| | Medicaid exclusion of gender-affirming care | Categorical exclusion of gender-affirming care | 15 (29) | 19 (37) | 21 (41) | 23 (45) | 16 (31) |
| | | No law (i.e., no categorical exclusion or mandatory coverage of gender-affirming care) | 35 (69) | 31 (61) | 29 (57) | 26 (51) | 27 (53) |
| | | Mandatory coverage of gender-affirming care | 1 (2) | 1 (2) | 1 (2) | 2 (4) | 8 (16) |

(*continued*)

TABLE 1. (CONTINUED)

| *Legal domain* | *Subdomain* | *Law* | *1996 No. of states (%)* | *2001 No. of states (%)* | *2006 No. of states (%)* | *2011 No. of states (%)* | *2016 No. of states (%)* |
|---|---|---|---|---|---|---|---|
| School settings | Antibullying—sexual orientation | Law prevents schools from creating bullying policies based on sexual orientation | 10 (20) | 9 (18) | 7 (14) | 5 (10) | 3 (6) |
| | | Law prohibits bullying but does not enumerate sexual orientation (i.e., sexual orientation not specified as a protected class) | 40 (78) | 41 (80) | 42 (82) | 36 (71) | 32 (63) |
| | | Law prohibits bullying, including by requiring schools to implement antibullying policies, specifically based on sexual orientation | 1 (2) | 1 (2) | 2 (4) | 10 (20) | 16 (31) |
| | Antibullying—gender identity | Law prevents schools from creating bullying policies based on gender identity | 10 (20) | 9 (18) | 7 (14) | 5 (10) | 3 (6) |
| | | Law prohibits bullying but does not enumerate gender identity (i.e., gender identity not specified as a protected class) | 41 (80) | 42 (82) | 44 (86) | 37 (73) | 33 (65) |
| | | Law prohibits bullying, including by requiring schools to implement antibullying policies, specifically based on gender identity | 0 (0) | 0 (0) | 0 (0) | 9 (18) | 15 (29) |
| | Discussion of homosexuality in schools | Prohibition of favorable or neutral discussion of homosexuality | 7 (14) | 9 (18) | 9 (18) | 9 (18) | 9 (18) |
| Hate crimes | Hate crime data collection—sexual orientation | Collects data for hate crimes committed on the basis of sexual orientation | 14 (27) | 22 (43) | 30 (59) | 30 (59) | 30 (59) |
| | Hate crime data collection—gender identity | Collects data for hate crimes committed on the basis of gender identity | 2 (4) | 3 (6) | 11 (22) | 13 (25) | 18 (35) |
| | Hate crime minimum sentence—sexual orientation | Criminalizes sexual orientation-related hate crimes | 13 (25) | 24 (47) | 31 (61) | 31 (61) | 31 (61) |
| | Hate crime minimum sentence—gender identity | Criminalizes gender identity-related hate crimes | 3 (6) | 5 (10) | 14 (27) | 15 (29) | 19 (37) |
| Sodomy | Sodomy prohibition | Prohibitory statute on the books and in effect | 21 (41) | 16 (31) | 0 (0) | 0 (0) | 0 (0) |
| | | Prohibitory statute on the books but unenforceable due to court decision (either state law decisions, or post-*Lawrence* beginning 2004) | 4 (8) | 6 (12) | 20 (39) | 20 (39) | 18 (35) |
| | | No such law on books | 26 (51) | 29 (57) | 31 (61) | 31 (61) | 33 (65) |
| | Unequal age of consent | Age of consent is equal based on type of sex or gender of persons | 49 (96) | 49 (96) | 49 (96) | 50 (98) | 51 (100) |

(*continued*)

Table 1. (Continued)

| *Legal domain* | *Subdomain* | *Law* | *1996 No. of states (%)* | *2001 No. of states (%)* | *2006 No. of states (%)* | *2011 No. of states (%)* | *2016 No. of states (%)* |
|---|---|---|---|---|---|---|---|
| Family formation and parenting | Adoption | Individual and joint adoptions by gay and lesbian people prohibited | 3 (6) | 1 (2) | 1 (2) | 0 (0) | 0 (0) |
| | | Prohibits only joint adoptions by same-sex couples (and not individual adoptions by gay or lesbian people) | 30 (59) | 33 (65) | 32 (63) | 28 (55) | 3 (6) |
| | | Does not prohibit either individual or joint adoptions | 18 (35) | 17 (33) | 18 (35) | 23 (45) | 48 (94) |
| | Second-parent adoption | Forbids second-parent adoption | 25 (49) | 23 (45) | 21 (41) | 22 (43) | 1 (2) |
| | | Does not forbid second-parent adoption | 26 (51) | 28 (55) | 30 (59) | 29 (57) | 50 (98) |
| | Foster parenting | Unequal treatment | 6 (12) | 6 (12) | 6 (12) | 5 (10) | 1 (2) |
| | | No law either way | 42 (82) | 42 (82) | 41 (80) | 38 (75) | 41 (80) |
| | | Express protection/required equal treatment | 3 (6) | 3 (6) | 4 (8) | 8 (16) | 9 (18) |
| HIV/AIDS | HIV criminalization | State does not have laws criminalizing HIV transmission | 34 (67) | 25 (49) | 23 (45) | 22 (43) | 23 (45) |
| | Informed consent | Law does not require informed consent prior to an HIV+ person engaging in intercourse | 37 (73) | 31 (61) | 29 (57) | 29 (57) | 29 (57) |
| Denial of services | Denial of services | State has denial of services law that explicitly refers to (i.e., explicitly singles out) LGBTQ people | 4 (8) | 3 (6) | 3 (6) | 3 (6) | 3 (6) |
| | | State has denial of services law that does not explicitly refer to LGBTQ people | 6 (12) | 13 (25) | 15 (29) | 18 (35) | 22 (43) |
| | | State has no denial of services law | 41 (80) | 35 (69) | 33 (65) | 30 (59) | 26 (51) |

Percentages may not total to 100 because of rounding.
LGBTQ, lesbian, gay, bisexual, transgender, and queer.

had no remaining prohibitory statute or constitutional amendment regarding same-sex marriage in their legal code in 2016 (Table 1).

Sodomy laws followed a similar pattern, with the criminalization of sodomy in half ($n = 25$) of U.S. states and D.C. in 1996, followed by legalization due to a Supreme Court decision in 2003[31]—with 18 states retaining their original antisodomy laws in 2016 despite this decision 13 years before (Table 1). One of the most marked changes pertained to adoption. Although 33 states prohibited individual and/or joint adoptions by gay and lesbian people or same-sex couples in 1996, by 2016, only 3 states did so (Table 1).

Further, while state laws that prevent sexual orientation- and gender identity-related discrimination against LGBTQ people became more prevalent during the study period (i.e., 1996–2016), they remained far from ubiquitous across the country by 2016 (Table 1, Figs. 1 and 2). For example, in 1996, 10 states had passed legal protections against sexual orientation-related private employment discrimination, and in 2006, 18 had done so. However, in 2016, still fewer than half (i.e., 23) of all U.S. states had passed protections against discrimination related to sexual orientation in private employment settings (Table 1 and Fig. 1). Moreover, in 1996, only 5 states had passed protections against sexual orientation-related discrimination in educational settings; although more states (i.e., 17) had passed such protections in 2016, the vast majority had not (Table 1 and Fig. 1).

Notably, compared with private employment and educational settings, less progress was made in passing protections against sexual orientation-related discrimination in health care settings from 1996 through 2016. Specifically, only 12 states had passed laws pertaining to sexual orientation-related nondiscrimination in health care in 2016, relative to 6 states in 1996 (Table 1 and Fig. 1). In all years from 1996 through 2016, legal protections against sexual orientation-related discrimination laws (especially those pertaining to employment and education) were largely in place in Northeastern, Western, and Midwestern states; in contrast, such protections had not been passed in any Southeastern or Southwestern state in any year during the study period (Fig. 1).

State laws that prohibit gender identity-related discrimination and protect the rights of transgender people have been and continue to be extremely limited—although they have become more prevalent, particularly in the last 10 years (Table 1 and Fig. 2). For example, in 2016, 21 states had passed legal protections against gender identity-related discrimination in private employment settings, compared with only 10 states in 2006 and only 1 state in 1996. Similarly, 13 states had passed protections against gender identity-related discrimination in educational settings in 2016, compared with only 3 states in 2006 and only 1 state in 1996. Further, in 2016, 11 states had passed laws pertaining to gender identity-related nondiscrimination in health care settings, compared with only 4 states in 2006 and no state in 1996 (Table 1 and Fig. 2).

Moreover, although 8 states explicitly required that Medicaid cover gender-affirming care in 2016 (compared with only 1 state in 1996), 16 states forbade Medicaid coverage of these procedures in the same year (Table 1). In all years from 1996 through 2016, gender identity-related nondiscrimination laws (especially those pertaining to private employment and educational settings) were largely in place in Northeastern, Western, and Midwestern states; in contrast, protections had not been passed in any Southeastern or Southwestern state in any year during the study period (Fig. 2).

In addition, there was notable progress in the passage of state laws pertaining to prohibiting sexual orientation- and gender identity-related bullying in school settings during the study period (i.e., 1996–2016; Table 1). For instance, in 1996, although 40 states had passed laws that prohibit bullying in schools (but do not enumerate sexual orientation as a protected class), only 1 state had passed a law explicitly requiring schools to implement policies prohibiting sexual orientation-related bullying in particular in that year.

Ten years later, in 2006, while 42 states had passed laws that prohibit bullying in school settings (but do not enumerate

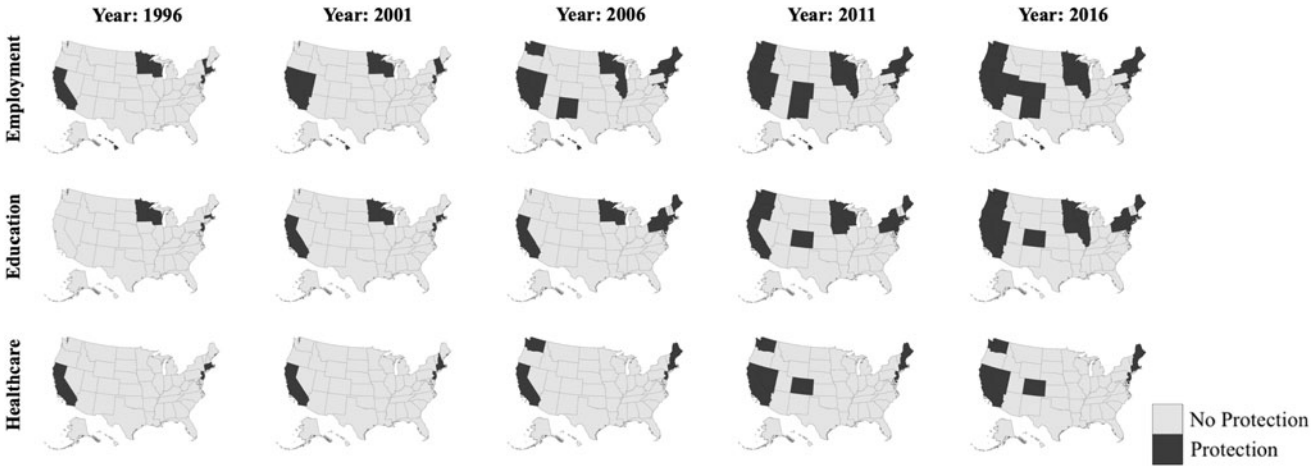


**FIG. 1.** Distribution of sexual orientation-related nondiscrimination laws in employment, education, and health care across U.S. states and the District of Columbia in 1996, 2001, 2006, 2011, and 2016. Employment refers to nondiscrimination laws that prohibit discrimination on the basis of sexual orientation in private employment settings; education refers to nondiscrimination laws that prohibit discrimination on the basis of sexual orientation in schools, colleges, and universities; health care refers to nondiscrimination laws that prohibit discrimination on the basis of sexual orientation in the provision of health care services and within health care settings.

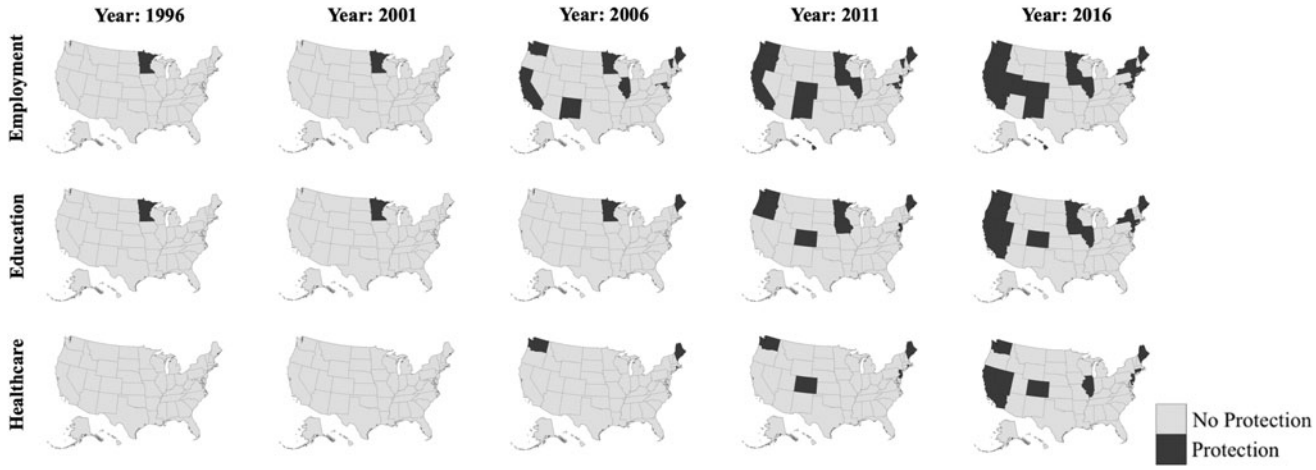


**FIG. 2.** Distribution of gender identity-related nondiscrimination laws in employment, education, and health care across U.S. states and the District of Columbia in 1996, 2001, 2006, 2011, and 2016. Employment refers to nondiscrimination laws that prohibit discrimination on the basis of gender identity in private employment settings; education refers to nondiscrimination laws that prohibit discrimination on the basis of gender identity in schools, colleges, and universities; health care refers to nondiscrimination laws that prohibit discrimination on the basis of gender identity in the provision of health care services and within health care settings.

sexual orientation as a protected class), only 2 states had passed laws explicitly requiring schools to implement policies prohibiting sexual orientation-based bullying (Table 1). In 2016, a total of 16 states had passed laws explicitly requiring schools to implement policies prohibiting sexual orientation-related bullying in schools. Similarly, although no state had passed a law explicitly preventing gender identity-related bullying in schools in 1996 and 2006, 15 states had done so by 2016 (Table 1).

Nonetheless, progress was lost in some sexual orientation- and gender identity-related legal domains between 1996 and 2016 (Table 1). For example, HIV transmission was criminalized in more states in 2016 than in 1996 (28 vs. 17 states). In addition, favorable or neutral discussion of homosexuality in schools was prohibited in nine states in 2016, compared with seven states in 1996. Finally, a greater number of states had passed a denial of services law that does not explicitly refer to, but could nonetheless negatively impact LGBTQ people in 2016 (i.e., 22 states) compared with 1996 (i.e., 6 states; Table 1).

## Discussion

We created a comprehensive, detailed multiyear database of 30 sexual orientation- and gender identity-related state laws in 9 legal domains in all 50 U.S. states and D.C. from 1996 through 2016. Findings based on the database highlight that, although progress has occurred in some areas, such as same-sex marriage, adoption, and employment discrimination (which was banned at the federal level on the basis of both sexual orientation and gender identity by a 2020 Supreme Court decision) laws, significant challenges to LGBTQ rights, health, and well-being remain, especially with regard to HIV criminalization, transgender rights, and discrimination in health care settings. Further, notable variation exists in the presence of sexual orientation- and gender identity-related nondiscrimination laws across U.S. states, with these laws concentrated in Northeastern, Western, and Midwestern states.

By linking our multiyear state-level database to health and social data from national population health surveys that include information on sexual orientation and/or gender identity over time, public health and social science researchers can contribute rigorous evidence on the impact of LGBTQ state laws on the physical, mental, and social health and well-being of SGM people across the life course. Researchers utilizing our sexual orientation- and gender identity-related state law database are encouraged to not only investigate the impact of LGBTQ state laws on the health of SGM people overall but also among multiply marginalized SGM subgroups (e.g., LGBTQ people of color, poor LGBTQ people, LGBTQ immigrants), in line with an intersectional approach that centers the lived experiences of multiply marginalized SGM populations.[32,33]

Adopting an intersectional approach would also entail combining our database with other state- as well as county-, city-, community-, and/or institutional-level databases pertaining to structural racism,[34] sexism, and xenophobia, among others—measured through not only laws but also policies, rules, regulations, practices, and norms. Such intersectional research would help us ascertain the joint effect of multiple, intersecting forms of structural discrimination at multiple levels and in multiple domains, both across and within SGM subgroups.[32,33]

Finally, along with critical scholarship in the social sciences and humanities, participatory methodologies that center the lived experiences of those who are multiply marginalized as well as structural, institutional, and community actions that advance social justice, this research can point us toward the development and implementation of new federal, state, and local laws, policies, regulations, systems, programs, practices, and norms that promote the collective rights and mental, physical, and social health and well-being of all SGM people.[17,18,35] Indeed, intersectional analyses and actions are essential to advancing the health and well-being of not only SGM people overall but also of multiply marginalized SGM individuals who bear the brunt of compounding forms of structural discrimination.[32,33]

### *Limitations*

A major limitation of our database is that it does not capture all of the legal and policy domains that are relevant to the rights, health, and well-being of SGM people, especially those who are multiply marginalized—including but not limited to incarceration, policing, and access to health-promoting social, economic, political, and health care resources—at not only the state but also the federal, county, city, and institutional levels.[18] In addition, we only conducted policy surveillance for the period from 1996 to 2016; as such, our findings are not applicable to the years before 1996 and after 2016.

Further, we did not collect information on the implementation and enforcement of state laws or other relevant aspects of anti-LGBTQ structural stigma (e.g., policies, rules, regulations, social norms, institutional practices), which may have a more direct and greater impact on the daily lives of SGM people.[18] Thus, additional efforts are needed to develop up-to-date multiyear databases that capture the broad range of structural factors at multiple levels and in multiple domains that affect the rights, health, and well-being of diverse groups of SGM people, including those who are multiply marginalized as a result of not only anti-LGBTQ structural stigma but also structural racism, sexism, classism, and xenophobia, across the life course.

Finally, we did not assess the reliability or validity of our database in this article; future research efforts will seek to develop and evaluate both the reliability and validity of state-level indices and subindices of LGBTQ state laws using our database.

### *Dissemination to the public*

We will make our database, along with the corresponding codebook and coding protocol, publicly available at no cost to other public health and social science researchers, policy analysts and advocates, community members, policymakers, and other key stakeholders through the Brown Digital Repository at the Brown University Library.[36] Data users will be asked to sign a data use agreement, and cite the database and this article in their publications. We will announce the release of the database publicly as soon as we have completed and published our primary analyses using these legal data.

## Conclusion

Rigorously developed and comprehensive multiyear state-level legal databases like ours can help assess changes in LGBTQ rights over time, evaluate differences in LGBTQ legal climate across states, and, when linked to health and social data, identify areas where action is needed to advance the physical, mental, and social health and well-being of SGM populations throughout the U.S. and across the life course. Further, this and other databases can contribute rigorous evidence to mobilization, organizing, and advocacy efforts that help repeal state laws that harm SGM people and facilitate the development of not only state but also federal and local laws that help promote SGM individuals' rights, health, and well-being.

However, to achieve social justice and health equity for all SGM people, societal, community, and institutional efforts that are informed by participatory social movements, center the needs and priorities of multiply marginalized SGM populations, and seek to generate new systems, institutions, practices, and norms that promote structural equity—including access to equitably distributed social, economic, political, and health care resources for LGBTQ and other marginalized populations—are urgently needed.[18]

## Authors' Contributions

S.B.A. and J.W. conceptualized and designed the work. S.B.A., J.W., M.S., M.A., A.E.P., A.L.S., B.M.C., and A.L.B. contributed to the acquisition, analysis, and interpretation of data for the work. M.A., A.E.P., and A.L.S. drafted the article, A.E.P. prepared the table, and A.L.B. prepared the figures. M.A., A.E.P., B.M.C., S.B.A., J.W., M.S., and A.L.B. contributed to revising the article critically for important intellectual content. All authors reviewed and approved the version of the article to be published and agreed to be accountable for all aspects of the work.

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