



A Review of Model Public Health Laws

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Model public health laws (public health laws or private policies publicly recommended by at least 1 organization for adoption by government bodies or by specified private entities) are promoted as exemplary. We assessed the information sponsors of model public health laws provide on the methods used in developing their models and on their models' adoption and effectiveness.

Through a systematic search, we identified 107 model public health laws published from 1907 to 2004. As of our assessment in 2005, only 18 (44%) of the sponsors presented any information on the procedures and evidence used in developing their model public health laws; information on adoption was provided for only 7 (6.5%) model laws. No sponsors provided information on model effectiveness. We recommend sponsors improve their disclosure of information about the methods and evidence used in developing model public health laws and about their adoption and ef-

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LAW HAS BEEN IMPORTANT

to public health historically and has gained new recognition recently as a tool to address a multitude of public health concerns.¹ A body of scientific information is developing as well on the effectiveness of laws as public health interventions. For example, the Task Force on Community Preventive Services recommends more than 1 dozen interventions that rely on law based on systematic reviews of peer-reviewed research on public health interventions.²

Public officials and others use information of many different types as they shape and seek to influence law making. These range from anecdotal information held by a small number of lay citizens to highly technical information shared by large professional communities. Model laws are another example of such in-

formation and are found in many public policy fields.

Model and uniform laws have a long pedigree. The original impetus for US uniform laws was the provision of the 1878 constitution of the American Bar Association that it promote "uniformity of legislation throughout the Union," leading to the creation of the National Conference of Commissioners on Uniform State Laws (NCCUSL) in 1915 to reduce heterogeneity in states' commercial laws.³ The NCCUSL has issued more than 200 "uniform laws," mainly in such areas as business, tax law, and workers compensation, but also in areas more related to public health concerns, such as health information privacy. The NCCUSL methodology involves systematic information gathering, public review and comment on iterative drafts of uniform laws, and ultimately, formal approval of uniform laws by its governing board. The NCCUSL also monitors states' adoption of its uniform laws.

The NCCUSL defines a uniform law as "one in which uniformity of the provisions of the act among the various jurisdictions is a principal and compelling objective" and a model law as one whose "principal provisions . . . can be substantially achieved even though it is not adopted in its entirety by every state."⁴ In this context, public health deals almost exclusively in model laws and seeks functional equivalence, more than uniformity, across jurisdictions.

Documented model public health laws date from at least as early as 1907 (Table 1). In his classic 1926 text, Tobey cited a model state law for morbidity reporting developed in 1913 by "a committee of the Conference of State and Provincial Health Authorities of North America" but which, he noted, had been "adopted in only a few states."⁵ Tobey also noted a municipal "Model Health Code prepared by a committee of the American Public Health Association."⁶



TABLE 1—Model Public Health Laws (N = 69), by Year of Original Publication

Original Year of Publication	No. of Model Laws	Subject Areas and Years of Revision
1907	1	Health statistics, revised 1992
1934	1	Food safety, revised 2001
1938	1	Injury, revised 2000
1980	1	Health statistics
1985	1	Health information privacy
1987	1	Preventive healthcare services, revised 1995
1988	1	Vaccination, revised 2001
1989	3	Injury (1); school health (1), revised 2001; privacy (1)
1990	1	Injury
1992	2	Injury (2), 1 revised 2001
1993	3	Tobacco (1); injury (1); vaccination (1)
1994	1	Injury
1996	3	Injury (2), 1 revised 2000; emergency preparedness (1)
1997	4	Injury (3); preventive health care services (1)
1998	3	Injury (2); school health (1)
1999	4	Injury (1); toxic exposure (1); privacy (1); rabies (1)
2000	6	Injury (2); tobacco (1); toxic exposure (1); reproductive health (1); hearing (1), revised 2001
2001	2	Injury (1), emergency preparedness (1)
2002	5	Tobacco (3), school health (2)
2003	18	Tobacco (15); toxic exposure (1); food safety (1); public health infrastructure (1)
2004	7	Tobacco (6); emergency preparedness (1)

Other early model public health laws include the 1924 pasteurized milk ordinance issued by the US Public Health Service and the Restaurant Sanitation Regulations proposed in 1935 by the US Public Health Service, the Conference of State and Territorial Health Officers, and the National Restaurant Code Authority.⁷

We report on a study of US model public health laws. Our first purpose was to identify and characterize current model public health laws. Our second was to determine the extent to which those who develop and promote model public health laws disclose

information on the methods used in developing them, on their adoption, and on their effectiveness. This bears directly on the important issue of the types of information elected and appointed public officials rely on in selecting public health legislation to support.

Here, “public health law” refers to statutes, regulations, ordinances and codes, agency rules, and administrative and judicial rulings intended to benefit the health of defined populations through prevention or health promotion. Our search methodology also identified several model policies intended for adoption by apartment

building managers, sports facility owners, and other private entities. Our case definition of a model public health law, therefore, is a public health law or private policy publicly recommended by at least 1 organization for adoption by government bodies or by specified private entities.

METHODS

In September 2004 and February 2005, we conducted identical systematic searches for model public health laws accessible on the Internet on the assumption that sponsors of model public health laws seek to communicate about their models actively and that the Internet is the most effective contemporary medium for doing so. We limited our search to Web sites accessible to the public, requiring neither payment for use nor membership in the sponsoring organization, and permitting access to the full text of a given model public health law. We used 3 alternative search tools, because it was not clear, on a priori grounds, which would be most productive: Google (<http://www.google.com>), PubMed (<http://www.ncbi.nlm.nih.gov/entrez>) or Yahoo (<http://www.yahoo.com>).

The 2 searches yielded identical results, identifying 107 model laws that met the case definition. All were identified through the Google and Yahoo search engines. A citation to another model law, identified as “Philip Morris’s ‘California Uniform Tobacco Control Act,’” was located through the PubMed service.⁸ Nothing more than its title, how-

ever, was located, and therefore it is excluded from the analysis.

To test the suitability of the Google and Yahoo search engines, we conducted a separate systematic search, using the LexisNexis legal research service, for model public health laws referenced in legal literature, including US and Canadian law review articles. LexisNexis is available only to paying customers. This search found citations to only 2 model public health laws. Both also had been found through the Google and Yahoo searches. The texts of the 2 models were not available through LexisNexis. This indicates that the Google and Yahoo search engines were suitable for this study.

We examined the accessed Web sites for the following information on each of the identified 107 model public health laws: (1) title and subject area; (2) year of first publication and of most recent revision, if any; (3) name and type of the sponsoring organization; (4) type of jurisdiction or organization proposed to adopt the model; (5) type of legal authority proposed; (6) methods used in developing the model; (7) adoption of the model; and (8) effectiveness of the model law as a public health intervention.

RESULTS

Frequency and Subject Areas

Our searches identified 107 model public health laws in 16 fields as shown in Table 2. (A detailed database of these laws, including the URL for each, is accessible at <http://www.cdc.gov/phlp>).



We believe these are the majority of extant model public health laws. Our search procedures found citations to additional models that did not meet our search criteria or the case definition. Among these were 31 models listed on the American Medical Association Web site with titles indicative of a public health orientation but for which additional information was available only to American Medical Association members⁹; the annual Suggested State Legislation published by the Council of State Governments but not available on the Internet (the 2004 edition contained 41 state laws of which 7 appeared to meet our case definition of model public health laws)¹⁰; a school health model act sponsored by the American Heart Association¹¹; and an American Diabetes Association model act requiring in-school services for diabetic students but whose text was not available on the Internet.¹² Additional models surfaced in the course of our study, for example, Model Standards and Techniques for Control of Radon in New Residential Buildings sponsored by the US Environmental Protection Agency,¹³ a model law regulating tobacco retailers sponsored by the Public Health Institute based in Oakland, Calif,¹⁴ and several model laws related to HIV/AIDS sponsored by the American Legislative Exchange Council.¹⁵

Our search procedures did not impose time parameters. Thus, any model law located through the standard searches and conforming to the case definition is

TABLE 2—Model Public Health Laws (N = 107), by Field

Field	No. of Model Laws
Tobacco control	36 (33.0%)
Injury prevention	25 (23.4%)
School health	18 (16.8%)
Toxic exposure	5 (4.7%)
Emergency preparedness	3 (2.8%)
Food safety	3 (2.8%)
Health information privacy	3 (2.8%)
Health and vital statistics	2 (1.9%)
Immunization	2 (1.9%)
Nutrition	2 (1.9%)
Preventive health care services	2 (1.9%)
Reproductive health	2 (1.9%)
Hearing	1 (0.9%)
Heart disease prevention	1 (0.9%)
Public health infrastructure	1 (0.9%)
Rabies	1 (0.9%)
Total	107 (100%)

included in the 107 identified models regardless of its vintage. Information on the date of original publication was available for 69 (64.5%) of the 107 identified model laws, as shown in Table 2. The context of the 38 remaining laws indicated that they were developed in the 1990s or more recently. Information on the dates of revisions to original models (all but 2 in the period 1999 to 2004) was available for 17 (15.6%) of the 107. However, the date of original publication was not available for 8 of the 17.

One half of the models for which original dates of publication were available were developed in 1993 or later and one third in 2000 or later.

Sponsor Organizations

Sponsors could be identified for 103 of the 107 model laws. There were 42 sponsor organizations. Ten each published 3 or more models and collectively accounted for 66 (60.6%) of the total: the American Academy of Pediatrics (16 models), the Technical Assistance Legal Center (11), Americans for Non-smokers Rights (7), the Center for Social Gerontology (7), the National Association of State Boards of Education (6), the National Committee on Uniform Traffic Laws and Ordinances (5), the Center for Science in the Public's Interest (4), the Illinois Coalition Against Tobacco (4), the American Heart Association (3), and the President's Commission on Model State Drug Laws (3). Thirty-two other organizations each issued 1 or 2 model laws.

Six types of sponsoring organizations were involved: nonprofit advocacy organizations (61 model laws, or 57.0% of the 107 total), professional associations (25 model laws, or 23.4%), government agencies (11 model laws, or 10.3%), academic institutions (3 model laws, or 2.8%), business trade associations (2 model laws, or 1.9%), and collaborations (1 model law, or 0.9%). The sponsors of 4 (3.7%) identified model laws could not be determined from the accessed sources.

Intended Adopters

Of the 107 identified model laws, 3 (2.8%) were proposed for adoption by the federal government, 65 (60.7%) for adoption by state governments, 17 (15.9%) for adoption by local jurisdictions (i.e., cities and counties), 14 (13.1%) by private businesses or nursing and other institutions serving the elderly (including 7 also proposed for adoption by states), 9 (8.4%) by school districts or universities, 5 (4.7%) by multiple government bodies, and 2 (1.9%) by tribes. Legislative action was by far the preferred vehicle for adoption, whether by Congress, state legislatures, or municipal councils or by the quasilegislation adoption of policies by state and local boards of education. The only exceptions were the 14 models proposed for adoption as policies by businesses, by nursing homes, and by private and public entities that operate nursing homes and similar facilities.

Mechanisms of Operation

We identified 5 general mechanisms through which the identified model laws would act. The most frequent was direct regulation, including prescribed and proscribed activity, standards, and penalties: 77 (72.0%) of the 107 models relied exclusively on regulation, and only 6 included no regulatory powers. Other mechanisms proposed were as follows: creation of new general legal powers (18 models), public education (12 models), provision of new financial resources (8 models), and establishment of an advisory or oversight body (6 models).



TABLE 3—Number of Model Public Health Laws (N = 107) for Which Sponsors Provide Developmental, Adoption, or Impact Information

Type of Information Provided	No. of Model Laws
Development methods: Procedures	
Name of sponsor only	2
Name of sponsor and funder(s)	7
Name of sponsor, contributors, and reviewers	19
Same as above plus minimal process information	6
Subtotal	34 (31.8%)
Development methods: Evidence	
Scientific information	
Citations to “Centers for Disease Control and Prevention scientific guidelines,” “actual state/local policies,” and “expert opinion” (all by same sponsor)	6
“Synthesis of numerous complementary approaches ... to reduce mercury in waste streams”	1
Legal information	
On the basis of existing state laws (largely unspecified)	5
On the basis of existing federal law (unspecified)	1
Subtotal	13 (12.1%)
Adoption	
Identified the number of states adopting the model law	7 (6.5%)
Impact	
None of the above	60 (56.1%)

Development Methods

As Table 3 shows, our review found that sponsors presented information on the methods that they used in developing their model laws for only 47 (43.9%) of the 107 identified models. This information was divided into 2 general types: procedural and evidentiary. Procedural information encompasses information about the identities, characteristics, and roles played by those participating in the development of a given model. It also includes information about the development process itself, for instance, whether comments were solicited or received on drafts of a given model, the substance of

such comments, and how, if at all, they were factored into the published model.

Sponsors presented procedural information alone for 34 (31.8%) of the models. This information ranged from mere lists of the names of the sponsor and funding organization to 6 model laws for which the names of the review and development teams were listed along with brief descriptions of the development process.

The second type of information is the evidence that sponsors draw on in developing model laws. At least 2 bodies of evidence are relevant. One is information about the effectiveness of

a given law or legal tool in addressing a public health risk or condition. Conceptually, this technical knowledge may range from findings derived from rigorous scientific research to peer-validated “best practices” and to professional experience. A separate type of evidence relates to jurisprudential and legal doctrine. This corpus evolves largely through scholarly exploration of legal principles, newly adopted laws, and court rulings, especially those of the appellate courts, which establish prevailing interpretations of given laws.

Only 2 sponsors presented information on the scientific or technical information that they used, for only 13 of the 109 identified models. The description given by the sponsor of 6 school health policies was that they were “suggested by the [Centers for Disease Control and Prevention and] scientifically rigorous school health guidelines, actual state and local policies and comments reflecting the expert opinions of many reviewers.”¹⁶ The sponsor of a model law to reduce mercury waste said that its model was “a synthesis of numerous complementary approaches . . . [with] provisions and concepts that reflect current efforts to reduce mercury in waste streams.”¹⁷ No sponsor referred to published or unpublished research on public health laws’ effectiveness.

Only 4 sponsors presented legal information in support of their model laws. Six of their models were said to be based on existing state or federal laws, which were not specified further.

The sponsor of 1 also noted that it was based on New York state law, which had been upheld as constitutional by a US Court of Appeals.

Adoption and Effectiveness

Information on adoption of the identified model public health laws was available from the accessed information sources for only 7 (6.5%) of the 107 identified model laws. The Center for Law and the Public’s Health, which drafted 2 of the identified model laws (the Model State Emergency Health Powers Act and the Turning Point Model State Public Health Law), maintains detailed information on state legislative and administrative actions that it considers consistent with their provisions. The National Emergency Management Association presented similar detail for the Emergency Management Assistance Compact, as did the Food and Drug Administration for its Food Code. For the Shellfish Sanitation Model Ordinance, the Food and Drug Administration simply noted that an unspecified number of states “have agreed to enforce [it] as the requirements which are minimally necessary for the sanitary control of molluscan shellfish.”¹⁸ The Battery Council International stated that its Model Battery Recycling Legislation had been “adopted by legislatures in 37 states.”¹⁹ The Mercury Policy Project stated that its model, Omnibus Mercury Reduction Act, was “reflected in most recent state and federal legislation on mercury.”²⁰



To determine whether information on adoption and effectiveness of the identified 107 models was available elsewhere than on sponsors' Web sites, we conducted PubMed searches using the exact title of each of the 107 model laws and also using variants of the titles. This search found 1 article (published in 1982) reporting on a study of the effectiveness of 1 of the 107 model laws, the Model Fireworks Law, issued in 1938 by the International Fire Marshals Association. The researchers concluded that the model law, which restricts fireworks to public display, results in reduced incidence and severity of eye injuries.²¹ Our PubMed searches found no other publications on adoption or effectiveness of the 107 models. We did not attempt to verify sponsors' claims regarding their models' adoption.

One explanation for the paucity of information on adoption may be that model laws are not widely adopted, either because they are too new for wide adoption to have occurred or for other reasons. Sponsors may generally be satisfied that model laws have a valuable educational or "declarative" effect regardless of their actual adoption.²² Several sponsors recommended that their models not be adopted exactly as published but instead be used to assess existing laws or adapted as appropriate to the needs of a given jurisdiction. Such piecemeal adoption could be difficult to monitor accurately. Another consideration is the daunting challenge of evaluating the effectiveness of such broadly

framed models as the Turning Point Model State Public Health Act, which addresses the general legal authorities of state public health departments.

No sponsor provided information on the effectiveness of its models. Several explanations for this are possible. The lack of information on adoption necessarily implies a paucity of information on effectiveness. The relative novelty of most of the models may mean that few have been implemented and consequently that few assessments of effectiveness could have been completed. Finally, sponsors may lack resources to support the systematic evaluation of effectiveness.

DISCUSSION

That our study found 107 model public health laws issued by 42 separate organizations testifies both to an apparently widely held view that law can be a valuable public health tool and, more specifically, to the value that some public health proponents see in model laws. Although this point-in-time study cannot accurately discern trends, the frequency in issuance of model public health laws appears to be increasing and generally to mirror trends in the recognition of such public health concerns as tobacco, injury, and obesity.

Model laws, nonetheless, apparently have not been proposed in all public health fields. We found none targeted specifically to such significant concerns as sexually transmitted diseases, influenza, tuberculosis, or other infectious diseases; cancer and cardiovascular

disease; oral and visual health; or occupational health (aside from clean indoor air laws). It is possible that our search may have missed some models, that models are seen as unhelpful by proponents in those fields, or that models have not been developed there for other reasons. We note, however, that 1 model public health law, the Turning Point Model State Public Health Act, is crosscutting in nature, eschewing the categorical approach taken by other identified models and thus addresses a wide range of public health concerns.

Model laws are promoted as exemplary and worthy of adoption. Yet, we found that most sponsors disclose little information about the development, adoption, or effectiveness of their model public health law. Even such basic information as the year of development was unavailable for one third of the 107 identified model laws. Fewer than one half (44%) of the sponsoring organizations presented any information on the methods that they used to develop their model laws; those that did offered limited information. None of the Web sites accessed for this study presented more than cursory information on the extent to which a given model law reflects current scientific or practice-based knowledge about the effectiveness of law-based public health interventions or current jurisprudential doctrines. No information on adoption was presented for 100 of the 107 model laws, and no information at all was presented on their effectiveness. More information on these

points may be available through direct contact with model laws' sponsors, but it is striking, in this digital age, that they present little information on methods, adoption, and effectiveness in the most publicly accessible manner possible, that is, on the same Web sites where they present and promote their model laws.

The absence of such information means that policymakers and others have limited ways to learn about the provenance and merits of most model public health laws. It also impedes comparison of model laws that focus on the same public health issue. For example, the Model Tobacco Vending Machine Restriction Act issued by the President's Commission on Model State Drug Laws and the Tobacco Vending Machine Ordinance published by the Illinois Coalition Against Tobacco both address minors' purchase of cigarettes, yet their sponsors provide no basis for comparing the effectiveness of the different approaches taken in the 2 models.

We recommend sponsors consider a more systematic approach to developing model public health laws and that they disclose more information about their models' development, adoption, and effectiveness. The NCCUSL identifies the people involved in preparing its uniform laws and presents considerable information about its standardized process of drafting, review, revision, and formal approval for the models that it promulgates. The Center for Law and the Public's Health publishes detailed information on its Web site about



adoption of its model public health laws. In view of the powerful contribution that law can make to improved public health, we further recommend the formulation of standards for model public health laws that reflect and build on such precedents and that incorporate, to the extent practically possible, current knowledge about the effectiveness of law-based public health interventions.

The scope of our study precluded exploration of certain aspects of model laws that merit study. Perhaps the most important, and analytically the most challenging, is their effectiveness once adopted. Also important is whether the provisions of model laws actually establish powers supportive of the models' goals; legal analysis could illuminate whether deficiencies in the language of model laws may detract from the desired powers and effects. A related point is whether the provisions of model laws comport with prevailing court rulings, views on constitutional principles, and doctrine regarding the role of government. Analyses in these areas would generate information valuable to the many public health policymakers, practitioners, and attorneys who are actively assessing law as a public health tool. ■

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Note. *The findings and conclusions in this article are those of the authors and do not necessarily represent the views of the Centers for Disease Control and Prevention.*

Contributors

A.D. Moulton originated the study. D. Hartsfield developed the research plan. D. Hartsfield, A.D. Moulton, and K.L. McKie conducted the research, analyzed and interpreted the research findings, and prepared the article.

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Human Participant Protection

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