

Top-Down Federalism: State Policy Responses to National Government Discussions

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The national government can influence state-level policymaking by adopting laws that specifically direct the states to take certain actions or by providing financial incentives. But can national institutions also influence state-level policy change by drawing attention to an issue and by providing information about it, even when these activities do not produce new national laws? In other words, do policy *ideas* diffuse from the national government to the states? In this article, we examine whether hearings and the introduction of bills in Congress about antismoking restrictions influenced state-level adoptions between 1975 and 2000. Our findings reveal that national policy activities stimulated state policy adoptions, but only for states with professionalized legislatures and strong policy advocates.

The federal system in the United States creates opportunities for both the national government and state governments to enact policies to address societal problems. Because these separate but interconnected governments can observe each other's actions, policies that are stymied or not practical at one level might flourish at another. Furthermore, each level of government can react to the other's actions. Due to the high visibility of national-level policy discussions, for example, states can observe and learn from these activities. In other words, consideration of policies at the national level can diffuse downward to the states and influence state-level policy adoptions.

This sort of vertical diffusion, which contrasts with the usual focus in diffusion studies on *horizontal* diffusion (Graham, Shipan, and Volden 2013), can occur in multiple ways. In some cases, vertical policy diffusion may take a bottom-up form, such as where local policies spread to the state level (e.g., Shipan and Volden 2006; Gamkhar and Pickerill 2012), where state policies may serve as experiments for the

national government (e.g., Boeckelman 1992; Mossberger 1999; Weissert and Scheller 2008), or where countries' experiences provide the basis for international policy choices (e.g., Radaelli 2000). Conversely, top-down vertical policy diffusion results when the actions of a higher governmental level influence those of lower levels (e.g., Pacheco and Boushey 2014; Daley and Garand 2005; Wood 1991). Sources of such top-down influence range from intergovernmental grant conditions (e.g., Welch and Thompson 1980; Allen, Pettus, and Haider-Markel 2004; Clark and Whitford 2011) to mandates (e.g., Posner 1998; Woods and Bowman 2011) to preemptive lawmaking (e.g., Hills 2007; Shipan and Volden 2008; McCann 2015b).

Studies of top-down diffusion tend to focus on state laws that are adopted following national *laws* that feature such grants, mandates, or preemptions. Therefore, these works join questions of policy diffusion quite late in the policymaking process, after national policy decisions are made and all that is left to examine are the state responses to national directives. Recently, however, a small but important literature has begun to explore earlier stages in the policy process, such as proposals made within state legislatures or interest group formation, which serve as precursors to policy adoption (e.g., Karch 2007; Baumgartner, Gray, and Lowery 2009; Lowery, Gray, and Baumgartner 2011; Pacheco and Boushey 2014).

Extending this focus on earlier stages of the public policy process to top-down policy diffusion is especially important to understand policymaking in federal systems. Scholars of federalism are often interested in the question of which policy areas are handled by which level of government (e.g., Peterson 1995; Volden 2005; McCann 2015a). By focusing only on the decisions that come after national laws are passed, scholars are joining the discussion only *after* that key question has already been answered. In contrast, in this study we begin earlier in the public policy process, when issues are first discussed in congressional hearings and tentative proposals are offered in congressional bills. How do state governments respond to such activities?

We argue that top-down federalism is a *conditional* process, in that responses to national policy discussions will vary by state. In some states, national activity will yield an increase in the attention paid to the issue, whereas in other states the same increased national activity will lead states to step back from passing their own policies. We believe that such variance will be systematic, rather than random. Key aspects of the states' political environments will help determine how state governments respond to national policy attention. Specifically, highly professionalized state legislatures will rise to the challenge issued by national government involvement. Ambitious politicians in such states will seize upon policy solutions entertained at the national level and advance them in their home states. In contrast, politicians in less-professionalized state legislatures will interpret national activity as a sign that the national government may well address the issue at hand, so they can turn to other pressing business. Moreover, states with active policy entrepreneurs

and interest groups will see an opportunity in the heightened awareness promoted by national government policy discussions to push their policy agendas, while policymakers in states without such groups will view the lack of such entrepreneurs in the face of the formation of a nationwide agenda as evidence against acting hastily on the issue at hand.

We explore these expectations by examining the policy choices that states made in response to congressional hearings and sponsored bills in the area of antismoking restrictions between 1975 and 2000. During this time period, the state and national roles in smoking policies were still being formed, and each level of government was exploring its policy options. How states responded to both local initiatives and national debates would set the stage for the state-by-state patchwork of policies in effect today.

In the following section, we develop our theoretical expectations for how states react to national government policy discussions. Next we discuss the data used to discern just how active the national and state governments were on this important issue of public health. We then turn to the results, which provide broad overall support for the claims noted above and the hypotheses developed below. We conclude with a discussion of the implications of this study for our understanding of policy diffusion in a federal system.

The Logic of Top-Down Federalism

How might federal policy activity influence state actions, even if that federal activity stops short of producing actual national laws? We consider this potential influence from the perspective of state legislators by focusing on the micro-foundations behind the relationship between national and state action. From this perspective, the relevant question is: why might state legislators be more likely to adopt laws simply because the national government is paying attention to certain policy issues? We answer this question and develop our theoretical argument by drawing on existing legislative politics and federalism literatures.

First, as is well known, legislators have limited time but constantly face multiple and competing demands, which means they must choose how to allocate their time across different activities (e.g., Hall 1996). In particular, state legislators suffer from information overload and need signals about which areas deserve attention (Boushey 2010; Jones and Baumgartner 2005; Karch 2007). When the national government pays attention to a policy problem—debating it, searching for answers, considering alternatives, and so on—this attention sends a signal to state-level actors about the prominence and salience of the issue.¹ In this way, as Bednar (2011) has described, federal attention to an issue can “nudge” states to take action by increasing the salience of an issue. And elected officials are, as Eshbaugh-Soha (2006) has shown, more likely to address an issue as its salience increases.

Legislators, however, need cues as to which issues deserve their attention. National activity, by drawing attention to policy issues, can bring these issues to the top of the legislative agenda for states. Even when national hearings and bills do not result in new national-level laws, these national activities provide a signal to state legislators about which issues are most deserving of their attention. Furthermore, by increasing an issue's salience, this heightened attention at the national level may lead legislators to reject a longer-term approach, with detailed study and consideration of the pros and cons of various alternatives, in favor of a short-term perspective and quick policy adoption (Nicholson-Crotty 2009).

Second, legislators want to know not only which issues are salient, but also which ones may be popular. Most of these legislators, after all, will seek re-election and many will seek higher office (Squire 1998; Maestas 2003). Thus, national-level activity provides a second type of signal beyond whether an issue is salient. Since national activity indicates that there is at least some political support for policy change, the amount of such activity and the progression of new proposals through later stages of the public policy process gives state legislators a signal about the level of support for policy change. Although the signal that national activities provide about salience might be stronger, national activities also offer legislators at least some information about popularity. Thus, to the extent state legislators see evidence of popular support, they will be more likely to advance their own policies.

Finally, national policymaking activity provides state legislators with more than just signals about the salience, popularity, and likelihood of passage of laws. It also can provide information about the policies that are being discussed. Legislators can both learn about the alternatives available for dealing with a policy issue and gain information about which potential solutions are likely to be most effective. In other words, national institutions, by engaging in policymaking activities, provide a forum for the discussion of policy problems and the benefits and pitfalls that are associated with different political solutions.

Furthermore, national political discussions provide a stage for the entrance of political entrepreneurs and pressure groups on the various sides of a debate. Because state legislators have limited amounts of time and expertise, especially compared to Congress (e.g., Squire 2007; Squire and Hamm 2005), they may rely on interest groups that monitor national policy activities as a short-cut to gaining information about the policy environment (Baumgartner, Gray, and Lowery 2009).² This learning process provides states with knowledge about policies they can experiment with in their own jurisdictions, thereby potentially facilitating action and increasing both the speed and likelihood of adoptions.

A clear argument thus emerges for why state legislators might be more likely to adopt laws in a policy area when they observe congressional hearings and bill introductions in that area. Legislators can take this increased activity as a signal

that the issue is salient, indicating they should devote some of their scarce time to it. They may also learn about the popularity of the issue, and if they see that it is indeed popular they will choose to address it at the state level. Additionally, they can gain important information about the policy, learning both about the policy options available to them and the potential outcomes associated with those policies, as well as about the political support for those options. Taken together, then, national policymaking activity can increase the likelihood of state legislative adoptions.³ Put simply, whether motivated by credit claiming, protecting their policy turf, progressive ambition, or staking out ideological positions, state policymakers may be spurred on by national policy discussions. Our first hypothesis summarizes this view.

Increased Attention Hypothesis: The likelihood of state policy adoptions will increase when the national government focuses its attention on issues of concern to states.

In stark contrast to this first hypothesis, however, state lawmakers may learn from committee hearings and floor debates that potential policy solutions are difficult to adopt, politically controversial or unpopular, and rife with unintended consequences. Such discoveries may limit, rather than increase, state policymaking activities. In addition, for time-pressed state policymakers, national activity may provide relief, indicating that state policy responses are unneeded because federal action may be on the horizon. Indeed, national policy discussions reveal information to state actors about the likelihood and location of a final national policy (e.g., Allen, Pettus, and Haider-Markel 2004; Dubnick and Gitelson 1981; Hamilton and Wells 1990). Depending on the nature of that revealed information, state policymakers may therefore step back and defer to national policymakers, especially if they like the direction in which the national government is moving. After all, potential future national action may relieve the state of having to wade into a complex and potentially thorny policy area.

In this alternative view, increased national activity will *not* induce state policymakers to act. Rather, states might sit on the sidelines watching the national discussion and only become involved in the policymaking game if the national government does not seem to be moving in the right direction, or moving at all, as in the case of presidential vetoes stimulating state action (Karch 2012). This competing view is summarized as follows.

Intergovernmental Deference Hypothesis: The likelihood of state policy adoptions will decrease when the national government focuses its attention on issues of concern to states.

Given the competing and contradictory nature of these first two hypotheses, it may seem unlikely that they both could hold true. Yet, this is exactly what we

believe is the case across the states. That is, in some states we expect the increased attention effect to dominate, with state legislators motivated to enact more laws when exposed to more national activity, whereas elsewhere intergovernmental deference will be the dominant effect and state legislators will pass fewer laws when the national government is active. Which effect is larger will depend on political features that vary by state and that condition the ways in which state legislators are affected by national activity. In particular, we focus on two specific political and institutional traits that vary by state: the professionalism of a state's legislature and the interest group environment in the state.

As is well known, state legislatures differ markedly in their level of *professionalism*. Some state legislatures, such as in Michigan or California, meet regularly, attract highly qualified members who earn relatively high salaries, and have large staffs, including staff members who help standing committees develop expertise on topics within their jurisdiction. Other states, such as New Hampshire or South Dakota, have "citizen legislatures" that meet less often, pay their members a much lower salary, and tend to have fewer personal and committee staffers (Squire 2007). Overall, state legislatures that are more professionalized tend to have greater *capacity* to tackle policy issues (Huber, Shipan, and Pfahler 2001; Huber and Shipan 2002).

This greater capacity interacts with the legislators' motivations that we outlined above. First, the increased salience that accompanies more national activity is likely to induce legislators in professionalized legislatures to pass more laws for a variety of reasons. States whose legislatures bear the hallmarks of professionalism meet more often and thus are more likely to be able to free up room on their agendas when new issues appear on their radar. And these legislatures are then better able to adopt laws and do so at a higher rate than states with less-professionalized legislatures (Rogers 2005). As a result, when an increase in national activity demonstrates the increased salience of an issue, more-professionalized legislatures will be in a better position than less-professionalized legislatures to act and to pass new laws.

Second, because members of more-professionalized legislatures are more likely to seek reelection and election to higher office (Maestas 2003; Squire 1998), they are more likely to monitor policy activities at the national level. Unless the national activity produces a strong consensus that a policy is not worth pursuing, these activities will prove attractive to state legislators who are looking to build a record that will increase their future electoral odds. Thus, they are more likely than members in less-professionalized legislatures to build on the momentum created by national activities, based in part on the expected positive electoral effects.

Third, more-professionalized state legislatures are better able to learn from the actions of others (Shipan and Volden 2012, 2014). Because they have

developed some expertise, both within their staff and in their committees, legislators in more-professionalized legislatures are better able to take advantage of the activities at the national level in determining what sorts of state laws they should pass.

Even if less-professionalized legislatures notice the activities at the national level, and even if they can use the information they glean from these activities to identify specific actions that they want to take, they may simply lack the capacity to successfully move the issue through the legislative process. Moreover, when legislators in less-professionalized legislatures observe that another level of government is tackling an issue, they might decide to turn their attention to other concerns. Shipan and Volden (2006), for example, find that less-professionalized legislatures are unlikely to build upon local policy experiments to bring about state laws, while more-professionalized legislatures translate local policies into state law at a greater rate.

The following hypothesis reflects the logic that national-level activities will affect legislators in high- and low-professionalized legislatures in opposite ways.

State Legislative Professionalism Hypothesis: States with less-professionalized legislatures will be less likely to adopt policies when national government activity increases, while states with more-professionalized legislatures will be more likely to adopt policies as national government activity increases.

Policymaking in a state is also influenced by the preferences of lawmakers' various constituencies. At the institutional level, these preferences may manifest themselves in terms of interest group activities. Baumgartner, Gray, and Lowery (2009), for example, demonstrate that congressional hearings can affect the density of interest groups in the states. Yet, even absent such an effect, the existing interest group landscape in a state may affect how the state government responds to the national policy discussion. In particular, strong policy advocates will take advantage of national-level discussions and the enhanced policy salience these discussions bring to further advance their policy agendas (Boushey 2010; Mintrom 1997). They will do so by making sure that state legislators are aware of the increased salience. In addition, they will raise key points from congressional hearings in a politically sophisticated manner, indicating to legislators their support for such proposals. And they will help legislators to understand the ways in which congressional proposals can be tailored and adapted to particular state purposes. Thus, the presence of strong policy advocates in a state will stimulate the factors that already cause legislators to lean toward enacting more laws when there is increased national activity.

In contrast, states without such strong policy advocates may remain unmoved by national policy discussions. No one will bring those debates to the attention of state policymakers, and the opportunity raised by heightened policy salience

will pass the state by. This conditional response to activities by other governments can be characterized as follows.

Interest Group Activism Hypothesis: States with less policy activism will be less likely to adopt policies when national government activity increases, while states with strong interest group activism will be more likely to adopt policies as national government activity increases.

The conditional effects in the above hypotheses suggest positive state policy responses to national government discussions, but only among those states with professionalized legislatures or strong interest group advocates. States not meeting these conditions will either be unaffected by national government discussions or will be deferential to national policymakers, as suggested by the Intergovernmental Deference Hypothesis. Although these conditional hypotheses are certainly plausible, and build on logic that stems from micro-foundational ideas regarding legislators' abilities and incentives, it is worth noting that each is falsifiable. We also recognize that a certain logic exists for effects running in the opposite direction. For instance, because of their reduced capacity, less-professionalized state legislatures may be dependent on the national government to lend a hand in developing policy proposals about a policy area, while more-professionalized legislatures may have less need to draw upon information conveyed by federal activities. Or, regarding interest group environments, policy entrepreneurs may shift their efforts to the national scene as national activities increase, instead of pushing for state-level reform. Ultimately, support for these hypotheses (or the alternatives to them) must be judged empirically, through the type of analyses to which we now turn.

Data and Empirical Analyses

Although our hypotheses are general and likely to hold in numerous policy areas, in this article we focus on one specific policy area: antismoking policies, and in particular what are known as clean indoor air laws. This policy area is especially appropriate for testing our hypotheses for three key reasons. First, and most importantly, we need to focus on a policy area in which both the federal government and state governments pay attention to the issues and discuss policymaking options and opportunities, but in which many laws are adopted at the state level. After all, if the national government pays no attention to an issue, then there is no opportunity for states to learn from the actions of the national government. And if the national government regularly passes laws that mandate specific state-level action, that also leaves little discretion to the states. Clean indoor air laws strike the right balance, with significant amounts of state-level enactments and national-level debate and activity, but few national-level laws and regulations.

Second, the ideal policy area for hypothesis testing would be one in which there is a good deal of political debate, including conflict over what constitutes appropriate actions. Such debate and conflict means that the issue is salient, which in turn means that lawmakers may be looking for solutions and may be open to the possibility of learning from actions taken at other levels of government. Although many policy areas display these features, antismoking laws have been especially salient and conflictual (e.g., Eriksen and Chaloupka 2007). Furthermore, there is some uncertainty about the effects of antismoking laws (which means that there is room to learn); but it is not such a complex area that legislatures lack the capability to develop policy responses (e.g., Makse and Volden 2011).

The first two reasons for choosing this policy area are theoretical. The third is practical: we want to focus on an area in which state-level enactments took place within a well-defined period, and in which the data are available to test all of our hypotheses. Again, clean indoor air laws meet this requirement, with most laws (as well as the aforementioned debates) occurring during the period from 1975 to 2000.

Dependent Variable

To assess the influence of national activities on state policy adoptions, the dependent variable in our analysis is coded as having a value of 0 in the years a state has not yet enacted the policy and 1 in the year of the adoption. Once a state adopts a law, it is then dropped from the dataset in subsequent years. For robustness, we focus on two separate types of antismoking policies: laws that restrict smoking in government buildings and those that restrict smoking in restaurants.⁴ These policy areas differed from one another in their salience and contentiousness among the voting public, and therefore top-down federalism may play out differently in these two areas. We obtained the data for the dependent variable from the MayaTech Corporation, which updated and corrected the National Cancer Institute's State Cancer Legislative Database. Between 1975 and 2000, forty states enacted laws restricting or banning smoking in government buildings and thirty-two states enacted similar laws for restaurants.⁵ Our analysis focuses on whether the timing of these adoptions was influenced by national government policy activities.

Key Independent Variables

The crucial explanatory variable in our analysis is national policy activity. In particular, we want to assess whether policy activity that stops short of legislation, and thus does not directly create mandates or financial incentives for states to act, nevertheless affects state-level policy adoptions. To create our measure of federal policy activity, we focus on the actions of Congress and utilize data from

the Policy Agendas Project and the Congressional Bills Project.⁶ The Policy Agendas Project organizes and makes available online data on the activities of the US federal government from 1947 onward. From the Policy Agendas Project, we downloaded all congressional hearings and searched for the following terms: tobacco, smoking, nicotine, cigarette, cigar, youth access, smoke, environmental tobacco smoke (or ETS), in any field (e.g., title, description, and so on). Any hearing that did not include one of these search terms was discarded.⁷

We then repeated the same process using the Congressional Bills Project, which is a database of public and private bills introduced in the US House and Senate since 1947. Because this database includes policy topic and subtopic coding based on the Policy Agendas Project's codes, we were able to search for all bills introduced in the 94th through the 106th Congresses (1975–2000) for both the Senate and the House.

The resulting dataset included 1,292 federal activities from 1975 to 2000, of which 299 were hearing days (House, Senate, and Joint), 716 were House bills introduced, and 277 were Senate bills introduced. Using these observations as a starting point, we then narrowed the data to those activities that focused on the main arguments used to advance antismoking restrictions in government buildings and restaurants. In particular, these arguments tended to focus on the negative health effects of smoking and second-hand smoke. Therefore, we used the Policy Agendas Project's major topic and subtopic area codes to narrow the data to those federal activities specifically dealing with health.⁸ This approach reduced the activities to 98 hearing days and 403 bills (287 in the House and 116 in the Senate) for a total of 501 federal policy activities in the realm of tobacco and health. As shown in figure 1a, these activities vary considerably by year, with the health-related subset of tobacco activities closely tracking the broader set of all tobacco activities ($r=0.97$).⁹

Within the Health and Tobacco Activities data, bill introductions exceed the number of hearing days, although both occurred at substantial levels throughout the time period of our study, as shown in figure 1b. From these data we create *Federal Activities*, a variable that captures the relative number of hearings and bill introductions that occur in any given year. Specifically, to create a common scale, we normalized the number of House bills, Senate bills, and overall congressional hearing days so each has a mean of zero and a standard deviation of one. We then added these three values together to give an overall *Federal Activities* score.¹⁰ Like its component parts, this score has a mean value of zero. Consistent with figure 1, *Federal Activities* ranges from a low value of -2.15 in 1980 to a high value of 4.03 in 1997. In terms of interpretability, each one-unit increase in this variable is equivalent to a one-standard-deviation rise in its component parts (House bills, Senate bills, hearing days).¹¹

In examining whether federal activities spur state-level adoptions, temporal issues become paramount. Crucially, we lag our measure of federal activity.

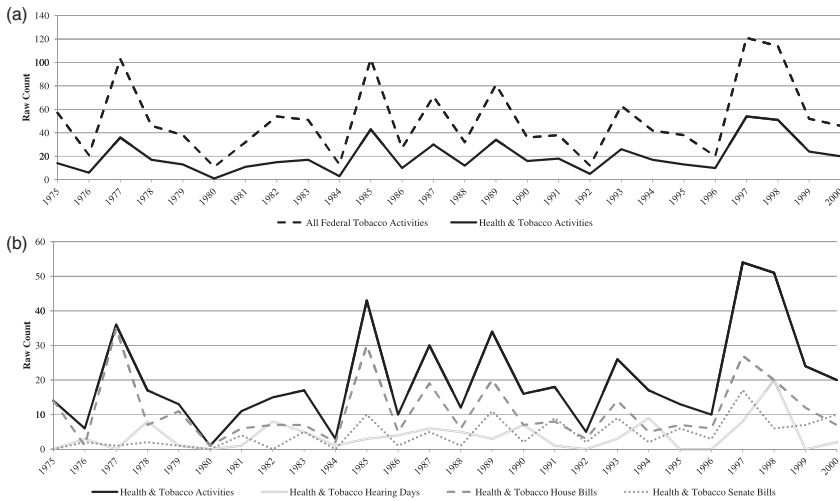


Figure 1 Count of (a) combined federal activities by year and (b) federal activities by year, separated by type.

Thus, we examine whether the hearings and bill introductions in year $t-1$ affect state-level policy adoptions in year t .¹² We also include federal activities in the current year (i.e., year t) in the model. A positive and significant coefficient for *Current Federal Activities* would indicate that both the federal government and the states are contemporaneously responding to a common policy disturbance (Baumgartner, Gray, and Lowery 2009).¹³

Lagged Federal Activities is, therefore, used to test the Increased Attention Hypothesis and the Intergovernmental Deference Hypothesis. In the other two hypotheses, we consider how the effect of federal activities is contingent upon two political factors: the level of state legislative professionalism and the state interest group environment. Therefore, we create interactions between *Lagged Federal Activities* and measures of these mediating factors.

Specifically, *Legislative Professionalism* is Squire’s updated and time-varying professionalism index, which compares each state legislature’s salary, average days in session, and staff per member to those of the US Congress.¹⁴ Thus, the overall index represents how closely the state’s legislature approximates the characteristics of Congress, with a hypothetical measure of 1.0 representing a state legislature that exactly matches Congress on those traits (Squire 1992, 2007). Apart from any interactions with federal activities, we expect a positive effect from professionalism, since more-professionalized legislatures are more productive and pass more laws (Rogers 2005). The expectation with respect to the interaction is that we should see a positive effect of federal activities for more-professionalized legislatures

(increased attention) and a negative effect for the less-professionalized legislatures (intergovernmental deference).

We capture interest group activism with *Health Organization Lobbyists*, a ratio of the number of lobbyists working in the state on behalf of health organizations to the overall number of lobbyists in the state.¹⁵ We expect this variable to be positively associated with the adoption of statewide antismoking laws generally. More importantly, the interaction of *Health Organization Lobbyists* with *Lagged Federal Activities* is used to test the Interest Group Activism Hypothesis, with an expectation for a positive effect of federal activities for highly activist states (increased attention) and a negative effect for states with low levels of activism (intergovernmental deference).

Internal Influences

To assess the influence of federal policy activities on state policy adoption (both contingent and not), we also control for a variety of well-established internal, or state-based, factors that are known to be associated with the probability that a state will adopt an antismoking policy.¹⁶ First, pressure groups are captured with controls for the power of health advocates and the number and power of tobacco industry proponents within the state. Second, citizen and producer pressures are measured by the percent of smokers in the state and the proportion of the state's budget spent on health. Third, we operationalize state economic ties to the tobacco policy area by measuring both whether a state is a tobacco producer (dichotomous variable) and a state's total tobacco production (in millions of pounds) for each year of the study.

Finally, we include measures of state government preferences. These include governmental activism, using the [Berry et al. \(1998\)](#) measure of government ideology (where higher values represent more liberal governments), and measures of unified Democratic and unified Republican state governments. More activist governments should be associated with a higher likelihood of passing laws, while unified Democratic governments would be expected to be more likely to enact smoking restrictions and unified Republican governments less likely to do so. We also control for local-to-state effects, using the proportion of state population covered by local antismoking restrictions. This measure is the proportion of the state's population that was covered at the start of each year for that particular type of antismoking law (i.e., government building restrictions or restaurant restrictions).¹⁷

External Influences

We also control for three external factors in our tests. First, we include an indicator variable for years following the Synar amendment, a law passed by Congress in 1992 that required states to meet certain conditions with respect to the sale of

cigarettes to minors (under age 18) or lose grant funding. This measure captures the effect of the one instance in which the federal government, through a mixture of a mandate and financial incentives, more directly attempted to influence state-level policy adoptions. Second, we include a measure of state-to-state diffusion (i.e., horizontal diffusion of antismoking policies), capturing the connections between states by using the proportion of contiguous neighbors that have already enacted the same policy prior to that year. As more neighbors pass restrictions, the likelihood that a state will also do so increases. And third, as discussed above, we include *Current Federal Activities*.

By controlling for both internal and external influences on state policy enactments, we can focus on the influence of national discussions and debate on the likelihood a state enacts a policy restriction in a particular year. Variable descriptions and summary statistics are offered in [Appendix table A2](#).

Results

As is typical for policy diffusion studies since the pioneering work of [Berry and Berry \(1990\)](#), we perform an event history analysis on our data, using logit due to the dichotomous nature of our dependent variables. Removing states after they have adopted a policy yields a total of 678 observations when the adoption of government building restrictions is the dependent variable and 807 observations when analyzing restrictions on smoking in restaurants. In addition, we use robust standard errors and cluster by state to account for potential issues of heteroskedasticity and temporal dependence.¹⁸

Independent Effect of National Activities

The Increased Attention Hypothesis and Intergovernmental Deference Hypothesis present competing views of how states might respond to heightened national policy discussions, either with a greater likelihood of policy adoption or with a lower likelihood. We present the tests of these initial hypotheses in [table 1](#), where Model 1 focuses on government buildings and Model 2 focuses on restaurants, and where the key independent variable of interest is *Lagged Federal Activities*. Neither the coefficient in Model 1 nor the one in Model 2 attains statistical significance at conventional levels. Therefore, we find no evidence that an increase in federal activities leads directly to more (or fewer) state-level adoptions in the following year.¹⁹ This could mean that federal activities have no effect on state adoptions; or it could be that any effect is filtered through other political and institutional variables.

Before exploring such conditional effects, we reflect on the other findings from [table 1](#), which are consistent across later model specifications. In particular, *Current Federal Activities* produces a positive coefficient, consistent with the idea that the

Table 1 Influence of federal activities on state antismoking restrictions

		Model 1	Model 2
		Government buildings	Restaurants
Key independent variables	Lagged federal activities	0.117 (0.095)	-0.018 (0.096)
	Legislative professionalism	-1.475 (1.808)	-1.718 (1.845)
Internal influences	Health organization lobbyists	0.282 (2.821)	10.674*** (3.755)
	Health organization influence	0.492* (0.294)	0.594** (0.299)
	Tobacco lobbyists	-21.996 (19.777)	-28.658 (26.380)
	Tobacco influence	-0.394 (0.433)	0.081 (0.613)
	Percent smokers	0.007 (0.073)	-0.037 (0.099)
	Proportion spent on health	14.301 (24.946)	37.492 (27.872)
	Tobacco-producing state	-0.809* (0.492)	-1.223** (0.616)
	Production (millions of tons)	-2.788 (2.601)	-15.676 (15.724)
	Government ideology	0.035*** (0.013)	0.035** (0.014)
	Unified Democrats	-0.118 (0.530)	0.049 (0.647)
Unified Republicans	0.303 (0.996)	0.192 (0.929)	
External influences	Proportion of population with local restriction	0.988 (2.397)	-0.447 (1.566)
	Synar amendment	-1.783* (1.019)	-0.945 (0.778)
	Proportion of neighbors with restrictions	0.948 (0.724)	2.064** (0.880)
	Current federal activities	0.334** (0.139)	0.294** (0.133)
	Constant	-4.877** (2.051)	-5.957* (3.126)
	N	678	807
	Wald $\chi^2(17)$	77.69***	56.23***
	AIC	292.65	247.19
	BIC	373.99	331.67

Notes. Robust standard errors in parentheses (clustered by state); * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$ (two-tailed).

same pressures that stimulate national discussions in any given year also stimulate state policy adoptions. The significant effect of *Current Federal Activities* suggests that states and Congress are concurrently reacting to emerging concerns in this policy area, a result that fits well with the conception that multiple governments in federal systems pay attention to the needs and concerns of their constituents. This is an important control, as it helps account for any other factors that affect the likelihood of attention to and action on antismoking policy issues nationwide in any given year. Beyond that key finding, we see that tobacco-producing states are less likely to adopt antismoking measures, health organization lobbyists spur legislative actions, liberal governments are more likely to adopt restrictions, and there is a horizontal diffusion of restaurant restrictions based on geography. Many other variables, such as *Tobacco Lobbyists*, have coefficients in expected directions, but fall short of statistical significance. On the whole, these findings are in line with our expectations, are highly consistent with earlier work in this area (e.g., Shipan and Volden 2006), and help establish that the baseline models of table 1 are performing as expected.

The Conditional Role of State Legislative Professionalism

As discussed above, the variability of state characteristics points to the possibility that different states might view national-level attention through different lenses. More specifically, this means that national activities may spur some states more than others. In table 2 we present our tests of the State Legislative Professionalism Hypothesis, using an interaction between *Lagged Federal Activities* and *Legislative Professionalism*. The positive and statistically significant coefficient on the interaction shows support for the hypothesis, with lagged activities having a greater stimulating effect in states with higher state legislative professionalism.²⁰

Given the difficulty in interpreting interaction effects directly, we illustrate the size of these effects across the entire range of *Legislative Professionalism* in figure 2, where the top panel shows the effects from the government buildings equation and the lower panel shows the effects for restaurant restrictions.²¹ The upward sloping lines reflect support for the State Legislative Professionalism Hypothesis. The dashed lines illustrate a 90% confidence interval, such that there is a five percent probability of the true relationship being below the lower-dashed line or above the upper-dashed line (appropriate for the one-tailed tests implied by our hypotheses). Thus, in figure 2a, we can say with ninety-five percent confidence that, for states with a legislative professionalism score above about 0.26, greater federal activity in the prior year is associated with greater government building restrictions in the current year. For a highly professionalized state, one with an average professionalism score of about 0.5, each one-unit increase in *Lagged Federal Activities* is

Table 2 Contingent effects of state legislative professionalism

		Model 3	Model 4
		Government buildings	Restaurants
Key independent variables	Lagged federal activities	-0.098 (0.136)	-0.311** (0.134)
	Legislative professionalism	-1.644 (1.931)	-1.864 (2.027)
	Lagged activities × professionalism	0.995* (0.523)	1.276*** (0.399)
	Health organization lobbyists	0.594 (2.879)	11.280*** (3.990)
Internal influences	Health organization influence	0.507* (0.293)	0.592* (0.306)
	Tobacco lobbyists	-22.221 (19.813)	-29.864 (26.742)
	Tobacco influence	-0.325 (0.451)	0.109 (0.632)
	Percent smokers	0.011 (0.072)	-0.026 (0.100)
	Proportion spent on health	13.357 (25.952)	36.876 (27.929)
	Tobacco-producing state	-0.789 (0.489)	-1.196* (0.632)
	Production (millions of tons)	-3.138 (2.594)	-15.767 (15.371)
	Government ideology	0.034*** (0.013)	0.036*** (0.014)
	Unified Democrats	-0.073 (0.525)	0.049 (0.645)
	Unified Republicans	0.329 (0.998)	0.190 (0.930)
External influences	Proportion of population with local restriction	1.345 (2.479)	-0.241 (1.608)
	Synar amendment	-1.673* (0.969)	-0.945 (0.759)
	Proportion of neighbors with restrictions	0.862 (0.731)	2.069** (0.900)
	Current federal activities	0.359*** (0.140)	0.320** (0.135)
	Constant	-4.935** (2.061)	-6.335** (3.177)
	N	678	807
	Wald $\chi^2(18)$	90.09***	119.23***
AIC	291.73	245.13	
BIC	377.59	334.31	

Notes. Robust standard errors in parentheses (clustered by state); * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$ (two-tailed).

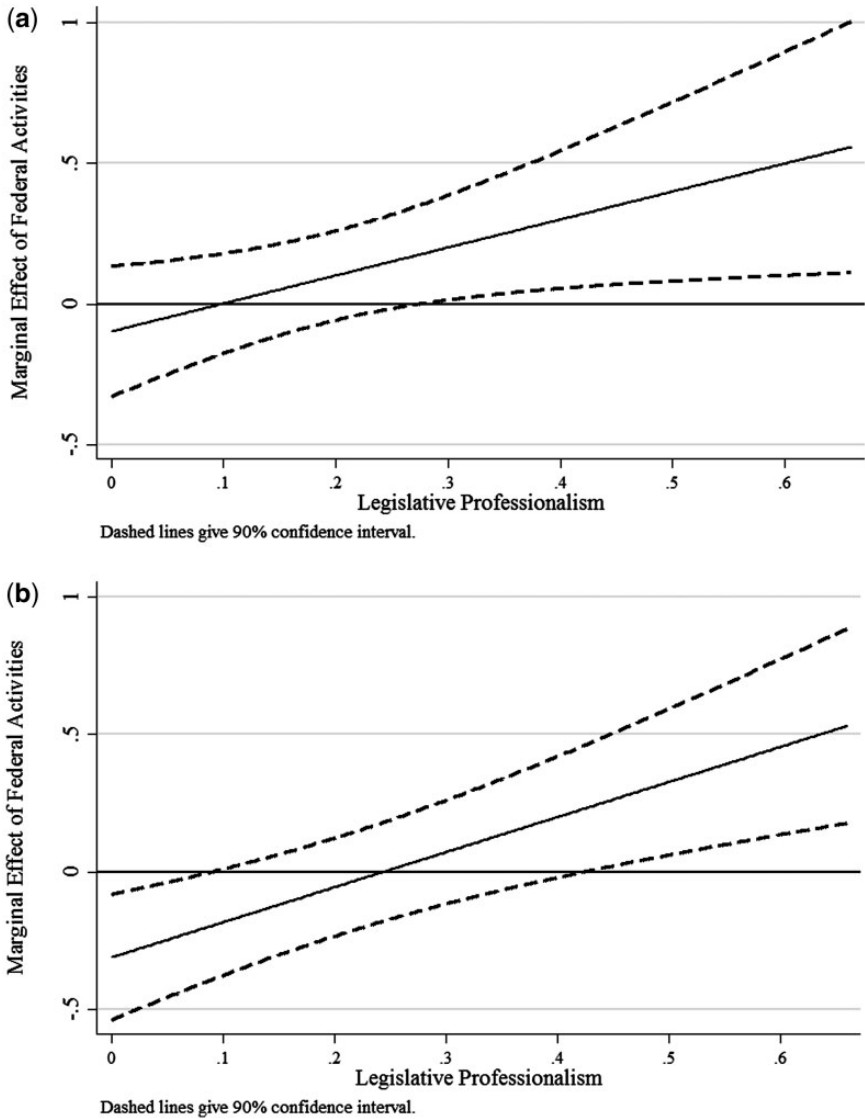


Figure 2 Effect of Lagged Federal Activities on State Adoptions, contingent on Legislative Professionalism, for (a) Government buildings and (b) Restaurants.

associated with about a fifty percent rise in the odds of the adoption of a government buildings restriction.

A similar pattern appears for restaurant restrictions, as seen in figure 2b. Once again, we see that for high levels of professionalism, greater federal activity in the previous year produces greater restrictions in the current year. For example, when

the federal government holds one additional hearing that lasts for four days, highly professionalized states will exhibit a fifty percent increase in the odds that they will adopt a tobacco restriction policy. In other words, even beyond the concurrent take up of tobacco and health as a problem deserving of state legislative action, state legislators also appear to be looking to what Congress did in the previous year and reacting by passing bills.²²

Although this pattern for restaurants is similar to the pattern for government buildings, one difference does emerge. As [figure 2b](#) shows, less-professionalized legislatures are actually significantly *less* likely to adopt restaurant restrictions when the federal government has engaged in policy discussions. For states with professionalism scores near zero, like New Hampshire, North Dakota, South Dakota, and New Mexico, each one-unit increase in *Lagged Federal Activities* is associated with a decline in the odds of adopting a restaurant restriction by about thirty percent.

As discussed earlier, either deference to the national government or an increased attention effect could be dominant in a state. What our results show is that for states with high levels of legislative professionalism, the increased attention effect dominates for laws restricting smoking in government buildings and for restaurant restrictions. For states with moderate levels of professionalism, neither effect dominates. And for states with low levels of professionalism, neither effect dominates for laws restricting smoking in government buildings, while the deference effect dominates for restaurant laws. This final result occurring only for restaurant laws may be due to the higher level of salience and conflict we noted in that area. Perhaps policymakers in less-professionalized legislatures are more than willing to defer to the national government when Congress shows an interest in such difficult policy areas.

The Conditional Role of Health Organization Lobbyists

The Interest Group Activism Hypothesis suggests that the effect of national policy discussions is conditional not only on state legislative professionalism but also on the interest group environment. In particular, we hypothesize that policy advocates will take national policy discussions and use them to advance their agendas. To explore this possibility, we interact *Health Organization Lobbyists* with *Lagged Federal Activities* and report the results in [table 3](#). As before, we find a positive coefficient on the interaction and one that achieves statistical significance in Model 6 for restaurant restrictions. These results are suggestive of enhanced responsiveness to federal activities within states that feature a large community of health organization lobbyists.

In [figure 3](#) we once again display the size of these effects, this time for the entire range of *Health Organization Lobbyists*. Consistent with the Interest Group Activism Hypothesis, there is a positive marginal effect of *Lagged Federal Activities*, but only for states with high levels of health organization lobbyists. In particular, the effect is positive and statistically significant where the ratio of health lobbyists to all

Table 3 Contingent effects of health organization lobbyists

		Model 5 Government buildings	Model 6 Restaurants
Key independent variables	Lagged federal activities	-0.120 (0.186)	-0.293* (0.178)
	Health organization lobbyists	0.571 (3.232)	12.263*** (3.650)
	Lagged activities × health organization lobbyists	2.611 (1.686)	2.995** (1.403)
	Legislative professionalism	-1.494 (1.783)	-1.620 (1.875)
	Internal influences	Health organization influence	0.475 (0.292)
	Tobacco lobbyists	-21.301 (20.054)	-31.176 (26.848)
	Tobacco influence	-0.387 (0.416)	0.028 (0.618)
	Percent smokers	0.002 (0.072)	-0.048 (0.098)
	Proportion spent on health	12.534 (25.801)	38.221 (27.862)
	Tobacco-producing state	-0.743 (0.497)	-1.302** (0.654)
	Production (millions of tons)	-2.811 (2.582)	-14.944 (15.784)
	Government ideology	0.034** (0.013)	0.036** (0.014)
	Unified Democrats	-0.086 (0.525)	0.057 (0.641)
	Unified Republicans	0.296 (0.989)	0.266 (0.946)
External influences	Proportion of state population with local restriction	1.062 (2.436)	-0.490 (1.571)
	Synar amendment	-1.761* (1.012)	-0.915 (0.768)
	Proportion of neighbors with restrictions	0.934 (0.728)	2.037** (0.881)
	Current federal activities	0.330** (0.138)	0.289** (0.133)
	Constant	-4.703** (2.045)	-5.844* (3.040)
	N	678	807
	Wald $\chi^2(18)$	82.99***	58.79***
AIC	291.80	246.16	
BIC	377.66	335.33	

Notes. Robust standard errors in parentheses (clustered by state); * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$ (two-tailed).

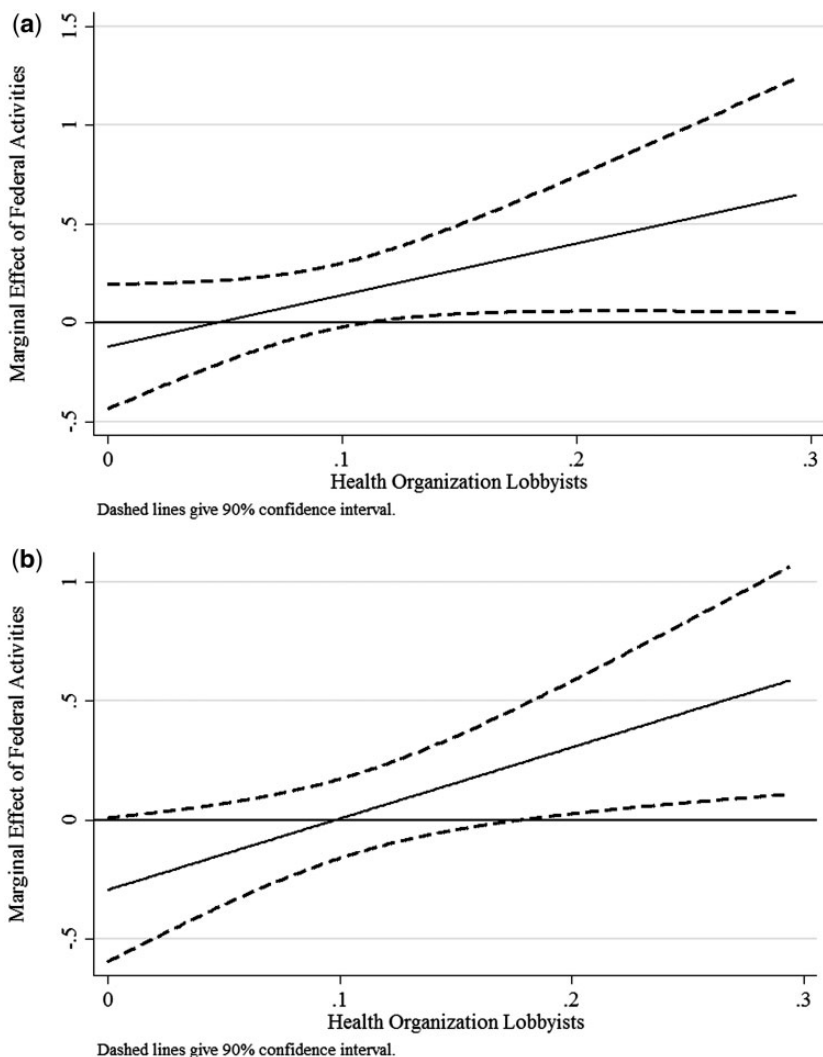


Figure 3 Effect of Lagged Federal Activities on State Adoptions, contingent on Health Organization Lobbyists, for (a) Government buildings and (b) Restaurants.

lobbyists exceeds 0.10 for government building restrictions and 0.18 for restaurant restrictions. When about twenty percent of state lobbyists have a focus on health, each one-unit increase in *Lagged Federal Activities* is associated with a rise in the odds of adoption by about forty percent for government building restrictions and by about thirty percent for restaurant restrictions. For instance, if U.S. senators propose four additional tobacco and health related bills in the prior year, the odds of a state with twenty percent health lobbyists adopting a government building

or restaurant smoking restriction will increase by thirty to forty percent. In contrast, states with very few health-oriented lobbyists tend to be nonresponsive to national government discussions, or even potentially deferential to the national government in such circumstances (particularly for restaurant restrictions).

Discussion and Conclusion

Our analysis contributes to a fuller overall understanding of two key aspects of the American federal system: policy diffusion and legislative politics. First, our finding that national policy discussions can affect state policy enactments, under particular conditions, extends current scholarship on vertical diffusion. More specifically, we show that policy *ideas* can diffuse in a top-down fashion, not just through grant conditions and mandates but also because national discussions may influence state policymakers' perceptions of the benefits of the policy, of the importance of the issue, and of their own need to act. Clearly it is important to understand the effects of mandates, grants, and other laws; but the analysis here shows a more nuanced way to capture national activity, one that potentially could be useful in a range of other studies.

Second, our study provides additional insight into the ways in which Congress can influence other political actors, even when it does not pass laws (e.g., Ferejohn and Shipan 1990). In particular, we show that Congress can affect policy by engaging in various types of exploratory activities, such as hearings and bill introductions, as these ideas diffuse across levels of government in our federal system. In a system with a high degree of congressional gridlock, it is important to recognize that national policymakers can nevertheless stimulate the generation of policy solutions through the bills they sponsor and the hearings they hold.

Perhaps most importantly, we did not find that national activities affect all states equally. Indeed, we initially found no overall significant direct effect of federal activities. Instead, our results demonstrate that these activities mattered only under certain conditions, and that their effects were moderated by state-level characteristics. Thus, although top-down diffusion occurs, it does not occur unconditionally, but instead depends on the professionalism of a state's legislature and the degree of interest group activism. In other words, it is contingent on political and institutional factors within the state.

Although the findings reported here are promising in clarifying the nature of top-down federalism, they have only been established in the context of one policy area: antismoking laws. This is, as we argued earlier, an appropriate policy area in which to test our hypotheses; but can we generalize from it to other policy areas? We contend that the results are generalizable, but within limits. In particular, we would expect to find similar results in other salient policy areas that meet a number of the criteria we spelled out earlier—the national government is active but does not pass many laws; states enact a large number of laws; there is disagreement about the best

policy to adopt and some uncertainty about the effects of laws. This set of criteria will not characterize all policy areas, but does describe a number of other prominent policies, including gun control, education, many health and welfare laws, and perhaps immigration and drug policy enforcement as well. We encourage other scholars to examine whether similar effects are found in these other areas.²³

We also recognize that our analysis faces some limitations. First, we do not unpack the underlying mechanisms of top-down diffusion, which could be based on learning, imitation, and even anticipatory adaptation by the states.²⁴ What exactly do state policymakers read into the smoke signals they observe from the national level? Second, we look at only two state-level political characteristics—legislative professionalism and interest groups. Other political factors also might modify the effects of national level activities, as might the economic environment within a state.²⁵ Third, we suspect that the most plausible alternative explanation is that both the states and federal government are reacting to the same external stimuli. We have controlled for this in a careful and appropriate way by lagging federal activities, but recognize that this issue could benefit from additional examination in future studies.

Fourth, by focusing on policy enactments, we limit our investigation to the influence of national activities on state-level adoptions. These adoptions are, of course, clearly important, as they represent the end product of the policymaking process and allow us to determine whether national activities can affect the production of laws in the states. The various choices of policymakers at earlier stages in the policy process, however, are important factors in the eventual enactment of laws. We expect that we are underestimating the effect of national policy activities on state-level actors by considering only those policies that are successfully passed by states, and encourage other scholars to examine the effect of national activities on earlier stages of the state-level policymaking process (e.g., Baumgartner, Gray, and Lowery 2009; Herrera and Shafer 2013; Pacheco and Boushey 2014).

Finally, our work may well be complementary to that of Karch (2007), who finds a “percolation effect” whereby a few states innovate, national actors then take up the policy debate, and eventually the rest of the states join the parade. In our analysis, we focus on only the second and third steps of this process, ignoring bottom-up vertical diffusion. The possibility that a few innovator states stimulate national activity, which then generates top-down diffusion, indicates that further research is merited. Does the national government play a mediating or moderating role with respect to state policy diffusion? In other words, if we consider innovators separately from later adopters, would vertical top-down diffusion still be apparent or does it just facilitate state-to-state diffusion later in the process? Additionally, for late adopters to enact a policy, does it take the combined effort of both early innovators and national actors? Having moved beyond the focus on top-down diffusion taking place solely through grant conditions and mandates, scholars are now poised to address such questions on a much larger scale.

Appendix

Table A1 Examples of federal bills and hearings

Year	Congress	Details	Chamber	Description
1975	94	HR4190	House	A bill to amend the Internal Revenue Code of 1954 to increase the excise tax on cigarettes, and to amend the Public Health Service Act to establish a trust fund to be used to fund the research programs of the National Cancer Institute.
1981	97	HR4957	House	A bill to amend the Public Health Service Act and the Federal Cigarette Labeling and Advertising Act to establish a national program under an Office of Smoking and Health to inform the public of the dangers from smoking, to change the label requirements for cigarettes, and for other purposes.
1987	100	HR1008	House	A bill to protect the health of nonsmokers working and visiting in United States Government buildings from the hazards of involuntary smoking by restricting smoking to designated areas in all buildings or building sections occupied by the United States Government.
1996	104	HR4245	House	A bill to restrict the access of youth to tobacco products, and for other purposes.
1998	105	HR3738	House	To establish a responsible United States international tobacco policy, to prevent tobacco companies from targeting tobacco products to children, to ensure no government promotion of tobacco overseas, to curb smuggling of tobacco products, to establish the American Center on Global Health and Tobacco, and for other purposes.
2002	107	S2626	Senate	A bill to protect the public health by providing the Food and Drug Administration with certain authority to regulate tobacco products.
1976	94	Hearing	Senate	Cigarette smoking and disease
1978	95	Hearing	House	Effect of smoking on nonsmokers
1982	97	Hearing	Senate	Comprehensive smoking prevention education
1986	99	Hearing	House	Restrict smoking to designated areas in all federal buildings
1990	101	Hearing	Senate	Tobacco health hazards, regulation of advertising
1994	103	Hearing	House	Environmental tobacco smoke, Public Health Service Act
1997	105	Hearing	Senate	Examine proposed negotiated settlement of product liability against tobacco companies
1998	105	Hearing	Senate	Review FDA regulatory authority over tobacco products
2000	106	Hearing	Senate	Examines state tobacco use prevention and reduction programs funded by settlement payments from lawsuits against tobacco companies
2003	108	Hearing	House	Considers Youth Smoking Prevention and State Revenue Enforcement Act

Table A2 Variable descriptions and summary statistics

Variable	Description	Mean	St. Dev.
State adoption of government buildings restrictions	Dummy = 1 if state adopts first government buildings restriction in this year	0.057	0.231
State adoption of restaurant restrictions	Dummy = 1 if state adopts first restaurant restriction in this year	0.038	0.192
Federal activities	Normalized measure of extent of congressional hearings and bills introduced	0.000	1.515
Legislative professionalism	Squire's (1992) updated professionalism index	0.204	0.125
Synar amendment	Dummy = 1 after Synar amendment took effect	0.308	0.462
Health organization lobbyists	Proportion of lobbyists in the state working for health organizations, based on 1994 snapshot	0.084	0.057
Health organization influence	Dummy = 2 if health organizations among top ten lobbying groups in state, = 1 if among top twenty, = 0 otherwise, based on 1994 snapshot	0.900	0.807
Tobacco lobbyists	Proportion of lobbyists in the state working for tobacco industry, based on 1994 snapshot	0.016	0.009
Tobacco influence	Dummy = 2 if tobacco industry among top ten lobbying groups in state, = 1 if among top twenty, = 0 otherwise, based on 1994 snapshot	0.140	0.448
Percent smokers	Percent of adults who smoke in the state	24.9	3.33
Production (millions of tons)	State tobacco production in millions of tons	0.020	0.075
Tobacco producing state	Dummy = 1 if tobacco produced in state	0.327	0.469
Government ideology	Ideology score for state government	50.2	22.9
Unified Democrats	Dummy = 1 for Democrats controlling state legislature and governor	0.339	0.474
Unified Republicans	Dummy = 1 for Republicans controlling state legislature and governor	0.119	0.323
Proportion spent on health	Proportion of state expenditures spent on health	0.033	0.012
Proportion of population with local government buildings restrictions	Proportion of state population living in localities with restrictions on smoking in public workplaces at the start of this year	0.071	0.133
Proportion of population with local restaurant restrictions	Proportion of state population living in localities with restaurant restrictions at start of year	0.072	0.136
Proportion of neighbors with government buildings restrictions	Proportion of geographic neighbors with government buildings restrictions at start of year	0.428	0.358
Proportion of neighbors with restaurant restrictions	Proportion of geographic neighbors with restaurant restrictions at start of year	0.327	0.331

Notes

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- 1 An exploratory analysis of whether increased levels of national-level activity are associated with increased levels of media attention reveals national-level activities—a measure we discuss below—are correlated at 0.76 with stories in the *New York Times* that focus on tobacco and hearings, and at 0.69 with stories that focus on cigarettes and Congress. A more detailed study of media coverage of national-level activities goes beyond the boundaries of this study; but these initial results suggest one pathway by which state legislators can learn about national activities.
- 2 In terms of state-level responses to national actions, our focus on policy adoptions complements Baumgartner, Gray, and Lowery's (2009) analysis of state interest group formation and Pacheco and Boushey's (2014) study of state bill introductions.
- 3 We focus on policy adoptions in states because of their role in affecting the behavior of businesses and individuals. At the same time, we recognize that adoptions are the end result of a multistage process that takes place within each state. For national activities to affect state policy adoptions, they would first need to influence bill introductions in each state, the likelihood that introduced bills continue to move through the process, and so on. We abstract away from these complications, but here make two observations. First, in our tests we do account for some of the factors (e.g., legislative professionalism) that influence whether bills are likely to be introduced and whether, once introduced, they are likely to advance. Second, to the extent that there is any slippage between the factors that cause introductions and those that cause adoptions, it will be more difficult to find significant effects.
- 4 The former category includes laws that specifically affect only government buildings and also those that limit smoking in both government buildings and other workplaces. Restaurant restrictions include requirements related to smoking section designations, bans on smoking in certain types of restaurants, and total bans on smoking in all restaurants in a state. Of the two, restaurant restrictions were more conflictual and their effects more uncertain.
- 5 Other smoking restrictions, such as cigarette taxes or youth access restrictions, could form the basis of future studies replicating and extending the findings uncovered here.
- 6 The websites for these datasets are <http://www.policyagendas.org/> (Frank R. Baumgartner and Bryan D. Jones, with the support of National Science Foundation grant numbers SBR 9320922 and 0111611, and distributed through the Department of Government at the University of Texas at Austin) and <http://www.congressionalbills.org/> (E. Scott Adler and John Wilkerson, *Congressional Bills Project: (1974-2000)*, NSF 00880066 and 00880061). Neither NSF nor the original collectors of the data bear any responsibility for the analysis reported here.

- 7 We also captured the number of lines in State of the Union addresses and Executive Orders that dealt with the same tobacco issues from the Policy Agenda Project's databases. We do not include them in this analysis due to the low number of such activities—two Executive Orders and thirteen State of the Union mentions across the time period. Analyses including these measures are not substantively different from those reported here. Similarly, models including the length and timing of Surgeon General's reports on smoking and health do not substantively change the results reported.
- 8 For example, a hearing related to tobacco price subsidies would have appeared in our first sweep through the datasets, but not our second. We also conducted a third sweep in which we eliminated all bills and hearings that addressed youth smoking. Removing these bills had little effect on our results.
- 9 Examples of bills and hearings are provided in [table A1](#) in the Appendix.
- 10 Such an approach gives equal weight to each of these three components with each on the same normalized scale. Alternative measures that combine all congressional bills or that place a greater weight on hearings than on bills yield results similar to those reported below.
- 11 Of note, off-cycle years were associated with significantly fewer activities than election years. To assess whether this cyclical nature of federal activities affected our analyses, we included an indicator variable for election years, both by itself and interacted with federal activity in the results reported below. This interaction variable was not significant and did not alter the patterns reported here.
- 12 If we were studying the *initiation* of proposals and bills at the state level, a lag might not be necessary, as proposals can be developed and bills introduced very quickly. This is the approach taken by [Pacheco and Boushey \(2014\)](#), who reasonably do not include a lag. But passing laws takes time, and given our focus on adoptions, it is crucial to lag national activities to allow enough time for proposals in the states to wind their way through the legislative process.
- 13 In our dataset, the correlation between the total level of attention this year and last year is 0.09, the correlation between this year and last year's bills introduced is -0.37 , and the correlation between hearings from this year and last year is -0.004 . Consequently, we are able to include both lagged and current measures in the same regression without multicollinearity concerns. Models excluding the contemporaneous variable do not change the substantive interpretation of the results, but do feature decreased efficiency in the standard errors, as would be expected.
- 14 This measure is constructed for the years 1979, 1986, 1996, and 2003 and ranges from the least professionalized state legislature at 0.027 (New Hampshire in 2003) to the most professionalized state legislature at 0.659 (New York in 1986). For each year, we relied on the temporally closest available professionalism value within each state. We replicated all results using real state legislative salary as a proxy for professionalism and found similar support for the State Legislative Professionalism Hypothesis. We report results for the index here to also account for differences in staff and length of session, beyond compensation.
- 15 This commonly used measure is based on work by [Goldstein and Bearman \(1996\)](#). Although it is a snapshot from the early 1990s, it has been used frequently by studies

- that analyze data over time, including Pacheco and Boushey's (2014) investigation of state bill introductions and Shipan and Volden's (2006) analysis of bottom-up federalism. Following Gray and Lowery's (2000) extensive efforts detailing the size and density of state interest groups through 1990, further work on state interest groups across multiple policy areas and extensions to the role of national think tanks or of groups such as American Legislative Exchange Council are welcome.
- 16 Including Boehmke and Skinner's (2012) state innovativeness score and Pacheco's (2012) Democratic public opinion measure had little effect on our results, changing neither levels of significance nor substantive conclusions. Because neither of these variables was statistically significant and including them did not significantly improve model fit, we do not include them in the models reported here. Similarly, using Enns and Koch's (2013) measures of Democratic or Republican public opinion also had no effect on our results.
 - 17 The results we present below are highly similar to those obtained if we also interact these local policy variables with our professionalism and interest group measures (e.g., Shipan and Volden 2006).
 - 18 To account for duration dependence, we also examined the effects of including either year, or both year and year-squared, as controls. Since these time trends were not significant across any of the models and since their inclusion had very little effect on the substantive interpretation of the results, they are excluded from the models reported.
 - 19 This is consistent with Pacheco and Boushey's (2014) finding that congressional hearings on tobacco have no direct effect on state-level bill introductions. Their study does not, however, examine whether hearings have an indirect effect.
 - 20 We test our State Legislative Professionalism and Interest Group Activism Hypotheses in separate equations, in part due to collinearity concerns, but mainly because testing both in the same measure greatly complicates the interpretation of the results, given that each test includes interactions with *Lagged Activities*. When we do include both in the same equation, results are highly similar to those discussed in this and the following section.
 - 21 The figures, drawn using Fred Boehmke's *grinter* command in *Stata*, show dY^*/dX on the y-axis, or the change in the log odds of enacting a restriction as the state characteristic examined (i.e., professionalism in figures 2a and 2b, lobbyists in figures 3a and 3b) changes. To assess whether the effects of professionalism were driven by specific high-professionalism outliers (e.g., Michigan, New York), we re-ran our tests while excluding each of the top five high-professionalism states one at a time as well as together. The results remain essentially unchanged from the findings reported here.
 - 22 Although fully *causal* evidence is difficult to come by in observational studies, the temporal nature of our research design helps eliminate the possibility of reverse causation. One plausible alternative explanation that we cannot fully rule out is that both the national and state governments are here responding to common shocks, but that states respond more slowly. However, given the strong positive coefficient on *Current Federal Activities*, such a lag in response to a common shock does not appear universal across the states. Moreover, with the effect of *Lagged Federal Activities* occurring only through the mediating variables of professionalism and lobbying, we instead attribute these relationships to the theory developed above.

- 23 Along these lines, [Herrera and Shafer \(2013\)](#) found that national-level activities influence governors' priorities in the area of health policy. Interestingly, they did *not* find such an effect for education.
- 24 Moreover, if states are learning from national-level activities, what exactly do they learn? Do states learn how to define policy problems and connect them to policy solutions, do they learn about the contentiousness or ambiguity of the policy area, or do they learn about the policy preferences and the likelihood of bill passage in the national legislature?
- 25 For example, one possibility is that national attention interacts with citizen ideology. Some studies (e.g., [Nicholson-Crotty 2009](#), [Mooney and Lee 2000](#)) have suggested the influence of ideology on state legislative actions is dependent on the salience of the issue. To test this, we interacted our measures of attention with [Berry et al.'s \(1998\)](#) measure of citizen ideology. If the hypothesis about a link between salience and public opinion were correct, we would expect to find that the marginal effect of public opinion increases as salience (or attention) increases. Although we do find that the predicted effect is positive, it is not statistically significant across different model specifications. We also examined whether congruence (or division) between the national partisan balance and the state partisan balance had an effect. It did not; and including this interaction had no effect on our results. Finally, we also investigated one economic condition: the importance of the tobacco industry to the state. Initial evidence suggests that this variable modifies the effect of national activities on laws that address government buildings, but not those that deal with restaurants.

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