Agenda Alternatives in the American States

### Abstract

This article investigates the specification of policy alternatives in state level agenda setting. Drawing on an original dataset classifying state level tobacco and vaccine related bill introductions from 1990-2010, we explore factors that determine the generation of state-level public health policy alternatives. We specifically evaluate how the diversity of state interest group populations, the professionalism of state governments, and the ideological polarization of legislatures influence the range of policy alternatives state governments consider in response to emerging public health problems. We find that gridlock caused by ideological polarization and interest group competition has a chilling effect on the specification of policy alternatives, as both interest group diversity and legislative polarization are associated with a decrease in the diversity of laws considered in a state legislative session. Conversely, we find that states with professional legislatures consider a more diverse set of policy alternatives than their peers.

**Keywords:** Agenda setting, alternative specification, state policymaking, public health policy, immunization, tobacco.

Students of federalism often characterize the fifty states as "laboratories of democracy", pointing to the critical role that local governments play in developing policy innovations (Brandeis 1932; Oates 1999; Tiebout 1956). Yet, while researchers know a great deal about the pressures leading state governments to adopt (e.g., Walker 1969), modify (e.g., Glick and Hays 1991), and implement (e.g., Lipsky 1980) a given policy, we know less about how state officials initially define problems and develop policy alternatives, a process called *alternative specification* (Kingdon 1995). Theory suggests that policy innovation emerges from a process of state policy experimentation, however we have only a limited understanding of how actively state governments search for policy solutions, or what factors may lead state governments to consider a broader or narrower set of policy solutions in response to public problems. In this regard, we know much about what leads to the *diffusion* of innovation, but less about the factors contributing to the *development* of innovations.

This paper focuses on the process of alternative specification in the American states. We specifically explore how institutional and political factors influence the *range* of policy alternatives generated by state legislatures in public health policy-making. This approach allows us to evaluate assumptions regarding the influence of interest groups, the importance of legislative expertise, and the challenges of ideological polarization that have been previously identified as key determinants of alternative specification at the national level (Baumgartner and Jones 1993; Kingdon 1995). We argue that each source of influence is instrumental in the generation of policy alternatives in the American states. First, we anticipate that states that have more diverse interest group communities will consider fewer policy alternatives than their neighbors, as interest group diversity invites conflict; leading groups to counter mobilize and cancel out the development of competing proposals. Second, we anticipate that states with more

professional legislatures will generate a broader range of policy alternatives, as more professionalized legislatures have the resources and expertise required to identify a full set of policies needed to effectively address an emerging problem. Finally, we expect that ideological polarization will have a chilling effect on the diversity of alternatives considered by states, as ideologically polarized legislatures impose policy-gridlock, leading to the development of fewer distinct policy alternatives over time.

To capture the range of policy alternatives generated by state governments, we draw upon an original dataset of over 23,000 state level bill introductions related to tobacco and vaccine regulation from 1990-2010. We focus on these two critical areas of public policy, as state governments have considerable autonomy in developing public health programs, but have faced common challenges in responding to population health threats posed by tobacco and infectious diseases over time. We code these data to identify different types of tobacco and vaccine policy alternatives specified by US state legislatures over the last twenty years.

Our research makes two distinct contributions to agenda setting theory. First, our focus on agenda alternatives expands our understanding of comparative agenda setting dynamics. While recent studies have documented the factors leading to differences in the number of bill introductions at the state level (Karch 2010; Whitaker et al. 2012), our research is the first to explore how state political and institutional characteristics influence the content of policy alternatives considered prior to adoption. Second, we draw on recent advances in computer-assisted content analysis for identifying state-level agenda alternatives (Collingwood and Wilkerson 2011). We use machine learning to automate the classification of a large data set of state level bill introductions. This approach facilitates our ability to operationalize and

systematically study comparative agenda setting dynamics and may prove useful for future researchers.

The paper proceeds as follows. In the next section, we briefly review research on agenda setting, focusing on the theoretical contributions of prior research on the process of problem recognition and alternative specification. We draw upon this discussion to develop a series of hypotheses for how variation in the policy participants, legislative expertise, and ideological polarization of governments shape the diversity of agenda alternatives. We then detail the data collection and estimation strategy and present our research findings. We conclude by discussing the implications of this work and future extensions.

### Agenda Setting, Problem Recognition, and the Search for Policy Solutions

Studies of agenda setting begin with an important assumption regarding the demands of information processing in public policy making. Elected officials in government face countless issues that require action, yet *political attention* is extremely limited (Lindblom 1959). Through agenda setting, government determines not simply which issues warrant immediate political attention, but also what dimensions of the policy problem should be addressed through public policy (Dearing and Rogers 1996).

Political scientists have consequently dedicated considerable attention to agenda setting dynamics, as the determinants issue attention, problem definition, and alternative specification are central components of political influence and power (Bachrach and Baratz 1962). Schattschneider (1975 66) famously asserted that "the definition of alternatives is the supreme instrument of political power," suggesting that political influence was exercised as much in the development of potential solutions as the ability to set the issue agenda itself. Following this seminal research, most studies of agenda setting have focused on two distinct stages of the

predecision process, exploring how publics and governments establish legislative priorities (e.g., set the agenda) and select policy solutions (e.g., agenda alternatives)

While agenda setting and the specification of policy alternatives are often folded into a single model (Cobb and Elder 1983), theory suggests these two distinct stages of predecision making are governed by different processes (Kingdon 1995; Zachariadis 1999). For instance, agenda setting may be determined by stochastic events beyond the control of elites in political office<sup>1</sup> (Baumgartner and Jones 1993; Downs 1972). Widespread public and political attention to political problems may be triggered by focusing events (Birkland 1998), changes in long-term indicators of problem severity (Dearing and Robgers 1996), or shifts in media attention to a specific problem (Shaw and McCombs 1977). Issues rise and fall in prominence, as political attention shifts from one pressing problem to the next (Baumgartner and Jones 1993; Downs 1972).

Once an issue has been placed on the agenda, government must decide whether action is warranted and what type of action to take. This subsequent stage of alternative specification is shaped by both changes in the political information regarding the nature or severity of a problem and the preferences of actors in the policy process (Kingdon 1995). Changes in political information shift the way policymakers and publics define policy problems, leading to the availability of fundamentally new solutions to an existing policy problem (Rochefort and Cobb 1994). The alternatives proposed and selected for action, however, are dictated by the preferences of those who have access to policymakers and who control the political agenda (Baumgartner and Jones 1993).

<sup>1</sup> This is not to imply that agenda setting is not influenced by the strategic behavior of political actors. The key point here is that issue attention can be unpredictable and episodic.

Depending on the complexity and severity of the issue, governments may need to generate a range of policy alternatives in order to adequately respond to a problem. Implied in the second stage of pre-decision making is the choice by governments to pursue a narrow or diverse set of agenda alternatives. To illustrate, consider the various ways (and options available to) state governments to regulate tobacco. Several states, most notably California and Massachusetts, have concentrated on a comprehensive approach introducing omnibus tobacco control policies aimed to alter community norms concerning smoking, and in the process, the smoking behavior of individuals (Warner 2006). Other states have concentrated on more specialized laws by regulating the tobacco industry through a mix of restrictions on advertisements and access to minors (Givel 2006). Still others have prevented localities from enacting more stringent regulations or have laws that elevate smokers to a protected class. Thus, although all state policymakers agreed (to some degree) that tobacco regulation was an important issue demanding governmental attention, there was widespread variation in the types of agenda alternatives proposed to regulate cigarette and tobacco use.

Surprisingly, while researchers have dedicated considerable attention to how governments develop specific policy innovations, little research has explored why some governments develop a more diverse set of policy alternatives in response to public problems than others. Additionally, because most research on agenda setting has explored decisionmaking at the national level, we have only a limited empirical understanding of how differences in political institutions influence the diversity of agenda alternatives.

In the next section, we focus on how variation in political institutions shapes the specification of policy alternatives in the American states. We specifically explore how the diversity of state interest group populations, the professionalism of legislatures, and the

ideological polarization of governments shape the range of policies government considers prior to action. This approach allows us to test key assumptions that have been advanced in case studies of national agenda setting, while also expanding our understanding of the determinants of policy making in the American states.

## Interest Groups and the Diversity of Policy Alternatives

Research has documented the critical role interest groups play in introducing policy ideas in the political system (e.g., Baumgartner and Jones 1993; Gray and Lowery 1996; Kingdon 1995; Schattschneider 1975; Schlozman and Tierney 1986). Organized interests inform and advise policymakers about policy solutions (Hansen 1991; Milbrath 1963), and provide legislative subsidies, research support and sample legislation in the hopes that they can shape the content of bills (Hall and Deardorff 2006; Kingdon 1995; Schlozman and Tierney 1986). In this regard interest groups do not simply influence the legislative priorities of government, but also shape the content of new policy proposals. As Kingdon (1995) notes, "Lobbies often don't begin the push for legislation or the push for agenda status. But even if they haven't started the ball rolling, once it is rolling they try to insure that their interests are protected in the legislation that emerges. In our terminology, they affect the alternatives considered, even if they haven't affected the agenda" (1995, 50).

While theory suggests that individual interest groups play a prominent role in developing policy alternatives, there is less agreement about how the overall composition of the interest group population may shape the *range* of distinct policy alternatives government generates in response to a given problem. Studies of state interest group populations have identified considerable variation in the *diversity* of interest group representation in government (Gray and Lowery 1996). In some states a narrow set of interests dominate lobbying, while in others

interest group representation is diverse—meaning there is broader and more proportional participation of registered lobby organizations (Gray and Lowery 1996). Researchers have theorized that such variation in the composition of an interest group population plays an important role in determining how governments set legislative priorities (Baumgartner and Jones 1993) and introduce and enact legislation (Gray and Lowery 1996). For example, classic research on iron triangles documents how policy-making is distorted when one policy community monopolizes influence in the legislature (Gais, Peterson and Walker 1984).

Interestingly, scholars have proposed fundamentally different ways that the overall composition of a government's interest group population may shape the specification of policy alternatives. Students of state regulatory policy making contend that interest group diversity should lead to a proliferation of legislation (Gray and Lowery 1996). The logic underpinning this perspective is straightforward. Organized interests have parochial legislative objectives, and will pressure policy makers to introduce specific legislation that most directly meets the legislative preferences of their members. As the number of different groups participating in government increases, so too will the number of public policy alternatives, as each affected interest works to influence legislation and maximize their benefit. This perspective suggests that increasing interest group diversity will lead to an increase in the range of policy alternatives government considers in response to a problem.

Yet more recent scholarship on interest group participation in the policy process cautions that diverse interest group systems may not lead to a proliferation of policy ideas (Baumgartner et al 2009; Gray and Lowery 1996; Kingdon 1995). Interest group lobbying is marked by conflict, and increasing interest group diversity may lead to widespread disagreement over the type of action government should take, or the need for action at all (Baumgartner et al 2009;

Gray and Lowery 1996; Kingdon 1995; Schattschneider 1975). As Gray and Lowery (1996) note, "In such uncertain and conflict ridden systems, more activity on the part of interest organizations may actually act to 'cancel out' interest influence" (200). Hence, increased diversity leads to more policy conflict among the interest group community (Baumgartner and Leech 1998), which results in a decrease in the diversity of policy alternatives specified and introduced within a state.

While little research has directly tested how the composition of a state's interest group population shapes the specification of policy alternatives, empirical studies of state agenda setting support the view that increasing interest group participation increases gridlock and hinders policy making. For example, Gray and Lowery (1996) find that increasing state interest group density was associated with a net decrease in the number of bills introduced or enacted by a state legislature.<sup>2</sup> This leads to a preliminary expectation regarding the impact of interest group diversity on the generation of policy alternatives in the American states: *H1: States will consider fewer policy alternatives when interest group diversity is high.* 

### State Institutional Capacity and the Diversity of Policy Alternatives

Beyond the participation of interest groups, research in state policy innovation suggests that differences in the capacity of state governments themselves shape the ability of states to respond to new issues demanding legislative attention. At the federal level, researchers have found that the participation of experts is an important determinant in the generation of policy alternatives, as these specialists have a sophisticated understanding of the issue, and are equipped

<sup>2</sup> Gray and Lowery (1996) include a separate measure of interest group diversity in the analysis. They find no effect of increasing interest group diversity on the overall number of bills introduced in a legislative session. to identify a full range of new policy solutions needed in response to public problems (Kingdon 1995; Zahariadis 2003). For example, Kingdon (1995, pp 127-131) argues that the specification of policy alternatives is a function of experts "softening up" proposals—introducing policy alternatives to gauge political support and legitimize new solutions. Walker (1981) compliments this perspective, suggesting that the specification of policy alternatives emerges as experts compete for recognition by introducing new alternatives for ongoing policy problems. At the federal level the implication is straightforward. Broader participation of experts in policy-making will lead to an increase in the range of new policy alternatives specified.

While the federal government invites robust participation of experts, there is considerable variation in the expertise and professionalism of state legislatures. Students of state government have documented considerable variation in the professionalism of state legislatures (Squire 2007; King 2000). While select states like California and New York have full time legislatures with long annual legislative sessions, other states like Montana and Delaware have part-time "citizen" legislatures hold short or biennial sessions. These professional and citizen legislatures also differ considerably in the resources and support provided to policymakers. The most professionalized states provide extensive personal and legislative support staffs for policy-makers, while less professionalized assemblies operate with only limited professional support for research and policy development (King 2000).

These differences hold clear implications for the ability of state governments to generate policy responses to emerging issues. States with more professionalized legislatures should be more able to identity political problems, engage in solution searches, and generate policy alternatives then their less professionalized peers. Professionalized governments may also be more qualified to anticipate a full range of new policy alternatives needed to address an

emerging problem, rather than focusing on a single solution. As researchers in public policy diffusion have observed, these differences may be especially pronounced when policy problems are complex and potentially costly, as with certain forms of environmental or public health policy regulation (Boushey 2010; Carter and LaPlant 1997). This leads to a second expectation regarding how the expertise of government structures the generation of policy alternatives: *H2: States with professionalized legislatures will consider a more diverse set of policy alternatives than states with citizen legislatures.* 

#### Ideological Polarization and the Diversity of Alternatives

In addition to the expertise of state governments, there is reason to expect that the political environment of state governments will influence the diversity of policy alternatives. In recent years, policymaking has become increasingly contentious, as political elites are more ideologically polarized. Studies of Congress have found that such polarization has resulted in a decrease in overall legislative activity (Binder 2003).

Although empirical research on the impact of ideological polarization has largely documented the impact of polarization at the national level (e.g., Layman et al. 2006; McCarty et al. 2006), recent research suggests that states have experienced a similar increase in polarization in the states (Shor and McCarty 2011). While the overall trend has been one of increasing division, there is considerable variation in the polarization of state legislatures. California has the most pronounced ideological divide between Democrats and Republicans, while Rhode Island and Louisiana have a narrower gap between the parties (Shor and McCarty 2011).

The polarization of state governments may work to limit the generation of policy alternatives for two key reasons. First, polarization in state legislatures leads to gridlock, limiting policymaking in government and stifling opportunities for the generation of new policy

innovations. Perhaps as importantly, ideologically polarized legislatures may value party discipline over policy entrepreneurship, rewarding legislators who hew closely to ideologically proscribed policy preferences rather than those who embark on bipartisan or consensus oriented solution searchers. This suggests the following hypothesis regarding the impact of polarization on the generation of health policy alternatives:

H3: States with more polarized legislatures will introduce fewer alternatives than less polarized state governments.

To summarize, we expect for state interest group diversity, legislative professionalism and the level of ideological polarization to influence the diversity of agenda alternatives across the American states. In particular, we expect for interest group diversity (H1) and ideological polarization (H3) to decrease the diversity of alternatives considered by state legislatures while legislative professionalism will expand the range of agenda alternatives (H2). In the next section, we describe the dataset used to test these hypotheses.

#### Data on the Diversity of Agenda Alternatives towards Tobacco and Vaccines

We test our hypotheses using a unique dataset on bill introductions in the states from 1990-2010 on two important public health issues, tobacco legislation and vaccine regulation. We focus on these two critical areas of public health for several reasons. First, state governments have considerable autonomy in developing public health policy, but have faced have common challenges in responding to population health threats posed by tobacco and infectious disease over time. Drawing on public health issues therefore provides us with an opportunity to evaluate how both cross-sectional and longitudinal variation in the severity of the problem and the participants in government shape the generation of policy alternatives. Second, because of the relative importance and salience of the disease burden that tobacco and infectious disease place on state governments, there is relatively good data documenting trends in problem severity and state public health capacity. This provides us with an opportunity to identify accurate measures of problem severity that may shape preferences for policymaking.

Finally, from a public health perspective, it is important to understand what influences state attention allocation to these two significant health issues. Cigarette smoking remains the single most preventable cause of death in the United States (Centers for Disease Control 2005) and takes its toll economically accounting for 6-10% of all health care costs (Warner 2006). According to the CDC, cigarette smoking is estimated to be responsible for \$193 billion in annual health-related economic losses in the United States. Immunizations are responsible for the control of many infectious diseases that were once common, including polio, measles, diphtheria, pertussis, rubella, mumps, and tetanus (Centers for Disease Control and Prevention 2009). Despite the overall success of immunization, each year as many as 42,000 adults die and thousands more are hospitalized from diseases that could be prevented by vaccination. The cost of treating these diseases exceeds \$10 billion each year (Council of State Governments 2007). While rates of coverage among children are high, adult immunization rates have stagnated and public officials have become increasingly concerned about the impact of the anti-vaccination movement on public health.

To measure the diversity of state agenda alternatives, we first collected data on bills introduced in American state legislatures related to tobacco and immunization from 1990-2010 using the State Bill Tracking database on Lexis Nexis State Capital.<sup>3</sup> Employing bill

<sup>&</sup>lt;sup>3</sup> The database is maintained by LexisNexis, a division of Reed Elsevier Inc. and is available at http://web.lexis-nexis.com. The database contains bill synopses for each bill introduced by each

introductions to assess legislative attention is common at the national level (Adler and Wilkerson 2011) as well as in the states (Baumgartner et al. 2009; Karch 2012; Whitaker et. al 2012). We identified a total of 20,634 bills related to tobacco introduced across the fifty states from 1990-2010 and a total of 3,257 vaccine related bills introduced during the same time frame. We divide our times series data into 11 legislative sessions: 1990, 1991-1992, 1993-1994, 1995-1996, 1997-1998, 1999-2000, 2001-2002, 2003-2004, 2005-2006, 2007-2008, and 2009-2010.<sup>4</sup>

To measure agenda alternatives, we categorized each of the tobacco or vaccine bills following a major topic classification scheme. We employed supervised machine learning software to classify state level bill introductions, using human and automated coding to classify policies (Collingwood and Wilkerson 2011). We categorized the tobacco bills into eight major topics that we believe capture the typology of policy alternatives considered within the realm of tobacco control (Smith et al. 2002). These categories include control, environment, agriculture, insurance, advocacy, litigation, finance, and miscellaneous. We categorized the vaccine bills into eleven major subject codes including school-related mandates, employment, insurance, animals, research and development, disclosure-registry, vaccine content, advocacy, public health service, administration of vaccines, and miscellaneous.<sup>5</sup> Intercoder reliability, as measured by Cohen's

state house in a calendar year. More detail about our data collection methods, including keywords used and inter-coder reliability can be found in the Supplemental Text.

<sup>4</sup> Five states (Kentucky, Louisiana, Mississippi, New Jersey, and Virginia) have legislative sessions on even years. Consequently, the 11 sessions are 1990-1991, 1992-1993, 1994-1995, 1996-1997, 1998-1999, 2000-2001, 2002-2003, 2004-2005, 2006-2007, 2008-2009, and 2010.
<sup>5</sup> The vaccine topic codes are similar categories identified by other researchers. See the National Council of State Legislatures Immunization Legislation Summaries

Kappa is .73 for the tobacco categories and .77 for the vaccine categories. Tables S1 and S2 in the Supplemental Text provide more details about the major subject categories for tobacco control and vaccine regulation, respectively. The Supplemental Text also provides detail on the software and computer assisted coding techniques used to download and categorize bills.

The majority of the tobacco bills fall into three categories: control, environment, and finance, although the dominant category varies across states and session. For instance, 48% of all the bills introduced in New York from 1990-2010 addressed controlling access to tobacco compared to only 15% in Montana. Meanwhile, 63% of the bills introduced in Wyoming from 1990-2010 concerned the financing of tobacco compared to only 16% in Massachusetts. Similarly, the number of bills introduced across all the states dealing with the hazards of environmental exposure to second hand smoke was high in the early 1990s, decreased in the early 2000s, and gradually rose to 24% in 2009-2010. As expected, the number of bills introduced across all the states dealing with the financing of tobacco increased sharply in the years following the Master Settlement.

There is much more variation across types of policy alternatives considered for vaccine related bills. For instance, most states considered at least one bill from each of the eleven categories from 1990-2010. School-related mandates took up a large portion of vaccine-related bills for certain states. From 1990 through 2010 sixty-two percent, 46%, and 44% of all the bills introduced in Missouri, Ohio, Arkansas dealt with school-related mandates, compared to only 4% in New Hampshire where the majority of bills dealt with animal vaccination. Arkansas

(http://www.ncsl.org/home/search-results.aspx?zoom\_query=immunization). We acknowledge that bills can fall into more than one major topic code, however, we instructed our coders to force each bill to correspond to only one code.

(25%), Nebraska (20%), and Texas (20%) spent the most time on immunization disclosure or registry bills. Finally, while many states did not propose any vaccine related bills that dealt with government advocacy, some states, such as Texas (9%), Indiana (9%), and Minnesota (8%), dedicated considerable attention to expanding awareness of immunization programs. As with tobacco, there appears to be longitudinal variation in when certain policy alternatives appeared on state agendas. For instance, following concern over vaccine's role in the Autism epidemic, a number of state level bills regulating vaccine content emerged in 2005 after receiving virtually no attention previously. Alternatively, school mandates tend to be a common policy alternative across time.

While the types of policy alternatives are substantively interesting, the focus of this paper is on the diversity of agenda alternatives. Consequently, we create a measure that sums the number of distinct categories that have more than one bill introduction for both tobacco legislation and vaccine regulation in each state session. The overall mean for the tobacco diversity measure is 4.27 with a standard deviation of 1.39 while the overall mean for the vaccine diversity measure is 2.95 with a standard deviation of 2.14. In substantive terms, this means that on average, states introduced 4 distinct types of tobacco bills and 2 distinct types of vaccine bills from 1990-2010. There was more diversity in the agenda alternatives selected for tobacco regulation compared to vaccine regulation. These measures of the overall diversity of agenda alternatives serve as our dependent variables.<sup>6</sup>

<sup>6</sup> We also calculated a Herfindahl index of diversity using the following equation,  $\sum_{i=1}^{n} s_i^2$  whereby  $s_i$  is the proportion of bills that fall into each category, *i*, and *N* is the number of bills introduced on tobacco or vaccines in each state-legislative session. Substantive results are nearly identical with this alternative measure. Discrepancies in results are footnoted.

#### [Figure 1 about here]

**Figure 1** shows the diversity in agenda alternatives for tobacco related bills for selected states from each region across legislative session. As shown in Figure 1, there is large heterogeneity across states in the number of policies considered over time. States, such as Illinois and California, generally consider more policy alternatives than other states, such as Ohio and Colorado. While some states (e.g., Minnesota, Florida) show large shifts in the number of policy solutions considered, other states (e.g., California and New York) have less longitudinal variation.

**Figure 2** shows a similar graph for vaccine related bills. States are much more likely to consider only 1 policy alternative for vaccine related bills compared to tobacco bills, as shown by the frequency with which states have a value of 1 on the score. In addition, there seems to be more longitudinal variation in the number of distinct bills considered for vaccines compared to tobacco. States such as New York and California consistently consider more policy solutions for vaccine related bills compared to other states, such as Alabama and Ohio. Some states (e.g., Alabama) have increased the number of policy alternatives considered over time while others (e.g., New York) are more stable.

#### [Figure 2 about here]

Although states that consider a large number of bills concurrently consider more policy alternatives, the correlation between the overall volume of policies introduced in a given session and the array of policy alternatives considered is not perfect, particularly for tobacco related bills (r = .59 for tobacco and r = .85 for vaccines). This suggests some interesting dynamics at work. For example, although Missouri introduced more bills related to immunization than California in 2003 and 2004, California considered many more policy alternatives in the same period.

Missouri's agenda is almost completely dedicated to expanding the distribution and access of immunization, while California covered virtually every category in our topic categorization.

### **Determinants of State Alternative Specification on Tobacco and Vaccines**

Recall that we have three hypotheses about how state policymakers select agenda alternatives. To evaluate whether states consider a less diverse set of agenda alternatives when interest group diversity is high (H1), we employ Gray and Lowery's 1997 interest group diversity data on lobby registrations in the fifty states (Gray and Lowery 2001a) where higher numbers indicate greater interest group concentration (or less diversity) within a state (see also Boehmke 2008). If H1 is correct, the coefficient on this variable should be statistically significant and positive, indicating that states with less diverse interest group populations consider a more diverse set of agenda alternatives.

To understand the relationship between state legislative expertise and the selection of policy ideas (H2), we include Squire's (2007) measure of legislative professionalism. Squire's measure is an index that estimates professionalism by capturing the salary, resources, time in session and staff provided to state representatives. We anticipate that more professionalized state governments will consider a broader range of public health alternatives than less professionalized institutions; the coefficient on this variable should be statistically significant and positive.

Finally, to test H3, which suggests that ideological polarization will decrease the number of alternatives considered, we use Shor and McCarty's (2011) measures of state legislative ideology. Recall that we expect for states to consider a more diverse set of policy alternatives when ideological polarization is low. Shor and McCarty (2011) combine state legislative roll call votes with state legislative survey data from Project Vote Smart (NPAT) from 1996-2009 to map states onto an ideological space using spatial models so that comparisons can be made across

states and time. We use Shor and McCarty's (2011) data to measure polarization by taking the difference between the party median scores on ideology averaged across chamber for each state session. Nebraska is excluded from the analyses since its legislature is nonpartisan.

Of course, studies of state policy making suggest a number of other factors that may play a key role in the development of policy alternatives (Berry and Berry 1990; Karch 2007; Walker 1969). Consequently, we include various control variables that may influence the range of agenda alternatives. To account for how differences in problem severity shape the generation of policy alternatives we include several measures of the public health challenges facing state governments. We measure problem severity towards tobacco using two variables: the percentage of smokers in a state and the smoking attributable mortality rate (SAMR). We expect for states with a large number of smokers to consider a more diverse set of agenda alternatives simply because of the burden that smokers place on the state's health and economics. This variable is time varying and taken from the CDC's Behavioral Risk Factor Surveillance System (BRFSS). For SAMR, we measure the average annual number of deaths caused by cigarette smoking for each state from 1997-2001. We expect for severity of tobacco to increase as the number of deaths by cigarette smoking increases. For immunization, we measure the rate of immunization from two important age groups. For children, we measure the average percentage of children 19-35 months of age vaccinated across a variety of diseases including diphtheria, tetanus, and pertussis (DTaP), poliovirus, measles, mumps, and rubella (MMR), Haemophilus influenza type b (Hib), hepatitis B, and varicella (chickenpox) pooled from 1995-2009.<sup>7</sup> For seniors, we

<sup>7</sup> These data come for the National Immunization Survey. Specifically, we took the average percentage of children from 19-35 months of age who were administered 4 or more doses of DTAP, 3 or more doses of 3 or more doses of poliovirus vaccine, 1 or more doses of any MMR

measure the percentage of residents aged 65 years and older who report receiving a flu vaccine in the past year pooled from 1995-2010 using the BRFSS. Here, we expect that as the rate of immunization increases, diversity of agenda alternatives should decline as the threat of outbreaks decreases

To account for how public opinion shapes the specification of policy alternatives, we include measures state liberalism and state partisanship measured by Pacheco (2011). We also include a measure of democratic strength in the state legislature in order to assess how state institutional partisanship shapes the specification of policy alternatives. This variable is the sum of percentages of state house and senate that are Democrats plus 100 if the governor is a Democrat (Bailey & Rom 2004). Following prior research linking citizen ideology and partisan control of government to public health policy-making (e.g., Paul-Shaheen 1998; Kousser 2002), we expect that liberal states and states with Democratic governments will more generate a more diverse set of tobacco and immunization policy alternatives than their more conservative and Republican controlled counterparts.

In addition to the participation of organized interests and elected officials, policy alternatives may be influenced by the participation of experts working in state public health bureaucracies (Kingdon 1995; Walker 1981). To assess how differences in the capacity of state public health agencies shape the generation of policy alternatives, we include a measure of the per capita health expenditures by state, taken from the US census survey of state governments. We expect that increasing state per capita public health expenditures will be associated with a more diverse set of agenda alternatives.

vaccine, 3 or more doses of Hib vaccine, 3 or more doses of HepB vaccine, and 1 or more doses of varicella vaccine.

To account for the influence of geography on the diversity of agenda alternatives, we measure the average number of policy alternatives considered for tobacco or vaccine bills in neighboring states. Specifically, we summed all of the distinct alternatives considered by neighboring states and divided this value by the number of neighboring states. Following theories of innovation and diffusion we expect for states to consider a wider variety of agenda alternatives when neighboring states consider a diverse range of policy solutions.

Finally, we include a counter variable for session to account for systemic influences on state attention that are not captured by the model.<sup>8</sup> The session counter accounts also for all election effects as well as any other annual level influences on state attention allocation to tobacco and vaccine (Lowery et al. 2011).

#### **Method and Results**

Given the times series cross sectional (TSCS) nature of the data, we estimate the models using ordinary least squares (OLS) regression with panel corrected standard errors (PCSE) to account for state heterogeneity and include a lagged dependent variable to account for serial correlation. Because our main independent variables are non-time varying, we do not include state fixed effects to account for state differences not fully captured by the model.<sup>9</sup> Scholars have noted that OLS regression with a lagged dependent variable and PCSEs is a valid approach to modeling the dynamics of TSCS models (e.g., Beck and Katz 1995; Beck and Katz 2011). To

<sup>&</sup>lt;sup>8</sup> We also included a squared version of the session variable, but it failed to reach statistical significance for both tobacco and vaccine counts.

<sup>&</sup>lt;sup>9</sup> Results available upon request, however, are nearly identical when using a random effects approach. We footnote the cases when results are not consistent.

ease statistical interpretation, all variables are normalized to range from 0 to 1; see Table A4 for summary statistics on all variables.

#### [Table 1]

**Table 1** presents the results for the OLS regression models predicting diversity in agenda alternatives for both tobacco and immunization policy. As the side-by-side comparison of the tobacco and vaccine coefficients suggest, both models provide similar predictions regarding the correlates of alternative specification.

As shown in Table 1, the coefficients across models suggest that *interest group diversity* is an important determinant of the diversity of agenda alternatives. Specifically, the models suggest that as interest group concentration increases from 0 to 1, the number of distinct agenda alternatives introduced by state legislatures *increases* by .64 for tobacco and by 2.7 for vaccines, holding all other variables constant. These findings support H1, indicating that as interest group diversity decreases states will consider a broader range of policy alternatives.

We find modest support for H2, which suggests that legislative professionalism will facilitate the diversity of agenda alternatives.<sup>10</sup> As shown in Table 1, states that are the most professional are predicted to consider .33 more distinct agenda alternatives for tobacco and 1.38 more policy categories for vaccine regulation, holding all other variables constant. This suggests that legislatures with greater policy expertise and resources will consider a broader range of policy alternatives than states operating under resource or professional constraints. Both models

<sup>10</sup> The professionalism measure fails to reach statistical significance for tobacco legislation when using random effects. The professionalism measure is also not significant using traditional significance levels when using the Herfindahl index of diversity for both tobacco and vaccine regulation.

also show strong support for H3, which suggests that legislative polarization will decrease the diversity of agenda alternatives.<sup>11</sup> Specifically, the model in Table 1 predicts that the most polarized state legislatures consider .85 fewer distinct agenda alternatives for tobacco and 1.33 fewer categories for vaccine regulation, holding all other variables constant. These results are consistent with research indicating an increase in gridlock in ideologically polarized legislatures (Binder 2003), which decreases both the number of bills introduced and the range of policy alternatives considered.

The models also show interesting conclusions for our control variables. First, we can confirm no statistically significant relationship between our measure of bureaucratic capacity— state per capita public health expenditures-- and the diversity of health policy alternatives. This may be due to the role that public health bureaucracy may play in specifying policy alternatives through rulemaking. States may delegate to bureaucracies the power to develop policy alternatives directly, meaning that the influence of high capacity bureaucracy may not be detected in models where the dependent variables are legislative bill introductions.

We find mixed evidence that problem severity is directly linked to the diversity of state policy alternatives. As shown in Table 1, as the percentage of smokers increase, so too does the diversity of agenda alternatives for tobacco. However, states that have a high mortality rate attributed to smoking are less likely to consider a large range of agenda alternatives. For vaccines, none of the measures of problem severity shapes the specification of a broad range of policy alternatives. The mixed findings may be because policy alternatives proliferate to more dramatic shifts in political attention, rather than in response to incremental changes in problem

<sup>&</sup>lt;sup>11</sup> The polarization measure is not statistically significant when using the Herfindahl index of diversity for vaccines.

indicators (Baumgartner and Jones 1993; Kingdon 1995), which we may have not adequately captured in the models.

We find evidence of the influence of geographic spillover, but only for tobacco regulation. Specifically, Table 1 shows that states are more likely to consider a diverse range of agenda alternatives on tobacco when neighboring states also consider a wide range of policy options. This is consistent with prior research that suggests that the probability of adopting a specific innovation is shaped by neighboring state activity (Berry and Berry 1990; Berry and Beybeck 2004), although more research is needed to explore why neighboring states are influential for tobacco and not vaccine regulation.

Finally, we find evidence that Democratic controlled legislatures and more liberal states consider a more diverse set of policy alternatives, which is consistent with prior research on the role of partisanship and ideology in state public health policy-making. In particular, Table 1 shows that states that have the highest percentage of Democrats consider 1.11 more types of tobacco policy alternatives. Similarly, states that have the highest percentage of liberals consider .92 more categories for tobacco and 1.06 for policy options for vaccine regulation. Results may be indicative of the fact that much of the tobacco and vaccine bills tilted in a direction that favored the policy positions of Democrats and liberals. In fact, while we do not specifically code for the partisan or ideological direction of bills, our coders noted that the majority of tobacco bills introduced aimed to *limit* tobacco and cigarette use, while the majority of vaccine bills aimed to *increase* immunization rates. Liberals and Democrats generally support expanding government regulation to protect population health. More research, perhaps on issues that are not leaning to one partisan or ideological side, is needed to confirm whether this effect can be generalized to other issue areas.

## Conclusion

This research expands on recent advances in comparative agenda setting, exploring how variation in the participants, capacity, and ideology of governments shapes the diversity of agenda alternatives. Drawing upon an original dataset of state level bill introductions on tobacco and vaccines in the states from 1990-2010, we identify factors influencing the specification of policy alternatives across subnational governments. We exploit variation across state political institutions to understand why the governments consider very different sets of policy alternatives, even when the severity of public problems or availability of agenda alternatives is similar.

Our findings provide a number of valuable insights into contemporary American politics. We find that *gridlock*—caused by either interest group competition or polarization in the legislature—has a chilling effect on the generation of public policy alternatives. First, the relationship between interest group diversity and the generation of policy alternatives provides an important insight into the process of state level agenda setting. In recent years, scholars of state politics have speculated that term limited and de-professionalized legislatures have become increasingly reliant on organized interests for policy ideas. Although some anticipate that such fluid participation of organized interests will lead to a proliferation of policy alternatives, our research suggests that states with more diverse interest group communities actually specify a more limited array of policy alternatives. This finding may seem counter-intuitive however it is well supported by classic theories of agenda setting (Kingdon 1995) as well as empirical studies of lobbying in state (Gray and Lowery 1996) and federal (Baumgartner et al. 2009) governments. Rather than leading to a proliferation of policy ideas, more diverse systems invite conflict, as groups counter-mobilize to keep unfavorable legislation off the agenda. The idea that states with *less* diverse interest group communities may consider a more diverse set of policy alternatives is also supported by research in the policy process. Walker (1981) notes, policy alternatives proliferate when there is broad consensus that a policy problem exists, but less agreement over how government should respond to a problem. Such dynamics are most likely to occur when there is relative coherence in the interest group community—a finding that has been well documented by studies of the formation and impact of advocacy coalitions in government (Sabatier and Jenkins-Smith 1999).

We find that ideological polarization in legislatures has a similar impact on the specification of policy alternatives. Indeed, our study adds to the chorus of concerns suggesting that ideological polarization in legislatures impedes policy-making. Ideological divisions appear to stifle both incentives for compromise and the avenues of innovation in American state governments. We believe that more polarized legislatures produce a narrower set of policy alternatives for two reasons. First, polarized legislatures will be less likely to agree on the need for action. Second, in polarized institutions policy-makers have stronger incentives to produce policy innovations that are ideologically consistent. Applied to the specification of policy alternatives, an ideological litmus test constrains the diversity of agenda items a government considers in response to public problems.

Finally, we find that states with more professional legislatures consider a more diverse set of policy alternatives than their peers. Again, this finding is consistent with studies of national agenda setting, which contend that the expertise of participants in the policy-process is an important determinant of the type and range of policy-alternatives considered (Kingdon 1995; Walker 1981). Policy problems can rarely be resolved with a single innovation, and states with the resources and expertise to invest in policy-making may be more equipped to identify the full

set of alternatives needed to resolve complex problems, such as those that arise in the protection of population health.

Beyond these implications for real politics, this research also advances our understanding of agenda setting and state policymaking. By focusing on the determinants of policy alternatives in state governments, we begin to explore how federalism shapes the process of agenda setting and problem definition in American politics. Studies of policy diffusion have largely used a simple binary measure to indicate whether a state has adopted an emerging innovation at a given point in time. However, these discrete innovations are themselves the product of a more dynamic process of problem recognition, problem definition, and alternative generation. This research opens up new questions about policy innovation that focus not simply on when and why states adopted a given policy, but rather why they paid attention to a policy problem and what alternatives policy-makers considered. By focusing on the many alternatives that emerge through agenda setting, this and future research will push us towards an improved understanding of the process of policy experimentation and innovation that play such a prominent role in federalism.

### References

- Adler, E. Scott, and John D. Wilkerson. 2013. *Congress and the politics of problem solving*. Cambridge University Press.
- Bachrach, Peter and Morton S. Baratz. 1961. "Two Faces of Power." *American Political Science Review*, 56 (4): 947-952.
- Bailey, Michael A. and Mark Carl Rom. 2004. "A Wider Race? Interstate Competition across Health and Welfare Programs." *Journal of Politics*, 66 (2): 326-347.
- Baumgartner, Frank R. and Bryan D. Jones. 1993. *Agendas and Instability in American Politics*. Chicago: University of Chicago Press.
- Baumgartner, Frank R. and Beth Leech. 1998. *Basic Interests: The Importance of Groups in Politics and in Political Science*. Princeton: Princeton University Press.
- Baumgartner, Frank R., Jeffrey M. Berry, Marie Hojnacki, Beth L. Leech, and David C. Kimball.
  2009. Lobbying and policy change: Who wins, who loses, and why. University of
  Chicago Press.
- Beck, Nathaniel, and Jonathan N. Katz. 1995. "What to do (and not to do) with time-series crosssection data." *American political science review*: 634-647.
- Beck, Nathaniel, and Jonathan N. Katz. 2011. "Modeling dynamics in time-series-cross-section political economy data." *Annual Review of Political Science* 14: 331-352.
- Berry, Frances Stokes, and William Berry. 1990. "State Lottery Adoptions as Policy Innovations: An Event History Analysis." *American Political Science Review* 84: 395-415.
- Berry, William D., and Brady Baybeck. 2004 "Using geographic information systems to study interstate competition." *American Political Science Review* 99(4): 505.

- Binder, Sarah A. 2003. *Stalemate: Causes and consequences of legislative gridlock*. Brookings Institution Press.
- Birkland, Thomas A. 1998. "Focusing events, mobilization, and agenda setting." *Journal of public policy* 18(1): 53-74.
- Boehmke, Frederick J. 2008. "The Initiative Process and the Dynamics of State Interest Group Populations." *State Politics and Policy Quarterly*, 8 (4): 362-383.

Boushey, Graeme. 2010. Policy Diffusion Dynamics in America. Cambridge University Press.

- Brandt, Patrick T. and John T. Williams. 2001. "A Linear Poisson Autoregressive Model: The Poisson AR(p) Model." *Political Analysis*, 9 (2): 1-21.
- Carter, Larry E., and James T. LaPlant. 1997. "Diffusion of health care policy innovation in the United States." *State & Local Government Review*: 17-26.
- Centers for Disease Control and Prevention. 2005. "Annual Smoking-Attributable Mortality, Years of Potential Life Lost, and Productivity Losses—United States 1997–2001." MMWR 54:265–68.
- Centers for Disease Control and Prevention. 2009. "How Vaccines Prevent Disease." Available at: http://www.cdc.gov/vaccines/vac-gen/howvpd.htm Accessed February 2, 2012.
- Cobb, Roger and Charles Elder. 1983. *Participation in American Politics: The Dynamics of Agenda Building*. Baltimore: John Hopkins University Press.
- Collingwood, Loren, and John Wilkerson. 2011. "Tradeoffs in Accuracy and Efficiency in Supervised Learning Methods." *Journal of Information Technology & Politics* 9(3): 298-318.

Council of State Governments. 2007. "Increasing Vaccination Rates." Available at http://www.healthystates.csg.org/NR/rdonlyres/E921A0B1-CBD5-4A29-8C93-8612CA6E2E77/0/IncreasingVacLPB.pdf Accessed February 2, 2012.

Dearing, James W. and Everett M. Rogers. 1996. Agenda-Setting. Thousand Oaks, CA: Sage.

- Gais, Thomas L., Mark A. Peterson, and Jack L. Walker. 1984. Interest groups, iron triangles and representative institutions in American national government. Cambridge University Press.
- Givel, Michael. 2006."Researching State Tobacco Policymaking: Issues, Data Sources, and Methods." State Politics & Policy Quarterly. 6(3):339-351.
- Glick, Henry R. and Scott P. Hays. 1991. "Innovation and Reinvention in State Policymaking: Theory and the Evolution of Living Will Laws." The Journal of Politics 53 (3): 835-850.
- Gray, Virginia, and David Lowery. 1996. *The population ecology of interest representation:* Lobbying communities in the American states. University of Michigan Press.
- Gray, Virginia and David Lowery. 2001a. "The Expression of Density Dependence in State Communities of Organized Interests." *American Politics Review*, 29:374–391.
- Gray, Virginia and David Lowery. 2001b. "The Institutionalization of State Communities of Organized Interests." *Political Research Quarterly*, 54:265–284.
- Hall, Richard L., and Alan V. Deardorff. 2006. "Lobbying as legislative subsidy." American Political Science Review 100(1): 69-84.
- Hansen, John Mark. 1991. Gaining Access: Congress and the Farm Lobby, 1919-1981. Chicago: University of Chicago Press.
- Karch, Andrew. 2007. *Democratic Laboratories: Policy Diffusion among the American States*. Ann Arbor: University of Michigan Press.

- Karch, Andrew. 2010. "Vertical Diffusion and the Policy-Making Process: The Politics of Embryonic Stem Cell Research." *Political Research Quarterly*.
- King, James D. 2000. "Changes in professionalism in US state legislatures." *Legislative Studies Quarterly*, 327-343.

Kingdon, John W. 1995. Agendas, Alternatives, and Public Policies. New York: Harper Collins.

- Kousser, Thad. 2002. "Politics, Economics, and State Policy: Discretionary Medicaid Spending, 1980-1993." *Journal of Health Politics, Policy and Law* 27:639-671.
- Layman, Geoffrey C., Thomas M. Carsey, and Juliana Manasce Horowitz. 2006. "Party Polarization in American Politics: Characteristics, Causes, and Consequences." *Annual Review of Political Science*, 9: 83-110.
- Lindblom, Charles E. 1959. "The science of" muddling through"." *Public administration review*, 79-88.
- Lipsky, Michael. 1980. Street Level Bureaucracy. New York: Russell Sage Foundation.
- Lowery, David, Virginia Gray, and Frank R. Baumgartner. 2011. "Policy Attention in State and Nation: Is Anyone Listening to the Laboratories of Democracy?" *Publius: The Journal of Federalism*, 41 (2): 286-310.
- McCarty, Nolan M., Keith T. Poole, and Howard Rosenthal. 2006. *Polarized America: The Dance of Ideology and Unequal Riches*. Cambridge, MA: MIT Press.

Milbrath, Lester M. 1963. The Washington Lobbyists. Chicago: Rand McNally

National Conference of State Legislatures. 2007. "2007 Enacted State Legislation Related to Immigrants and Immigration." Available at: http://www.ncsl.org/issuesresearch/immigration/2007-enacted-state-legislation-related-to-immigran.aspx Accessed February 2, 2012.

- National Conference of State Legislatures. 2011. "Immunizations." Available at: http://www.ncsl.org/issues-research/health/immunizations-policy-issues-overview.aspx. Access February 2, 2012.
- Nelson, Barbara J.1986. *Making an issue of child abuse: Political agenda setting for social problems*. University of Chicago Press.
- Oates, Wallace E. 1999. "An Essay on Fiscal Federalism." *Journal of Economic Literature* 37: 1120–1149.
- Pacheco, Julianna. 2011. "Using National Surveys to Measure State Public Opinion over Time:
  A Guideline for Scholars and an Application." *State Politics and Policy Quarterly*, 11
  (4): 415-439.
- Paul-Shaheen, Pamela A. 1998. "The States and Health Care Reform: The Road Traveled and Lessons Learned from Seven that Took the Lead." *Journal of Health Politics, Policy and Law* 23: 319–361.
- Rochefort, David A. and Roger W. Cobb. 1994. *The Politics of Problem Definition: Shaping the Policy Agenda*. Kansas: University of Kansas Press.
- Sabatier, Paul A. and Hank Jenkins-Smith. 1999. "The Advocacy Coalition Framework: An Assessment." in Paul A. Sabatier, ed. *Theories of the Policy Process* (117-168). Boulder, CO: Westview Press.
- Shaw, Donald L. and Maxwell E. McCombs. 1977. *The emergence of American political issues: The agenda setting function of the press*. West Publishing,

Schattschneider, E.E. 1975. The Semisovereign People. Hinsdale, IL: The Dryden Press.

Schlozman, Kay Lehman and John T. Tierney. 1986. Organized Interests and American

Democracy. New York: Harper and Row Publishers.

- Shor, Boris and Nolan McCarty. 2011. "The Ideological Mapping of American Legislatures." *The American Political Science Review*, 105 (3): 530-551.
- Squire, Peverill. 2007. "Measuring State Legislative Professionalism: The Squire Index Revisited." *State Politics and Policy Quarterly* 7 (2): 211-227.
- Tiebout, Charles. 1956. "A Pure Theory of Local Expenditures." *Journal of Political Economy* 64: 416–424.
- Walker, Jack L. 1969. "The Diffusion of Innovations among the American States." *APSR*. 63 (3): 880-889.
- Walker, Jack L. 1981. "The diffusion of knowledge, policy communities, and agenda setting: the relationship of knowledge and power." *New strategic perspectives on social policy*, 75-96.
- Warner, Kenneth. 2006. "Tobacco Policy Research: Insights and Contributions to Public Health Policy." In Tobacco Control Policy, ed. Kenneth Warner. San Francisco: Jossey-Bass.
- Whitaker, Erik A, Mitchel N. Herian, Christopher W. Larimer, and Michael Lang. 2012. "The Determinants of Policy Introduction and Bill Adoption: Examining Minimum Wage Increases in the American States, 1997–2006." *Policy Studies Journal* 40(4):626-649.
- Zahariadis, Nikolaos.2003. *Ambiguity and Choice Un Public Policy: Political Decision Making in Modern Democracies*. Georgetown University Press.

## Table 1. OLS Regression Predicting the Diversity of Agenda Alternatives toTobacco and Vaccine Bills from 1990-2010

Tobacco Legislation (N=487)			Vaccine Regulation (N=488)		
Tobacco Diversity of Agenda Alternatives (t-1)	.25	**	Vaccine Diversity of Agenda Alternatives (t-1)	.27	*
	(.08)			(.11)	
Interest Group Diversity (H1)			Interest Group Diversity (H1)	, , , , , , , , , , , , , , , , , , ,	
Interest Group Concentration Index	.64	**	Interest Group Concentration Index	2.76	***
	(.22)			(.52)	
Institutional Capacity (H2)	. ,		Institutional Capacity (H2)		
Legislative Professionalism	.33	*	Legislative Professionalism	1.38	**
	(.16)			(.53)	
Ideological Context (H3)			Ideological Context (H3)		
Legislative Polarization	85	**	Legislative Polarization	-1.33	**
	(.32)			(.49)	
Control Variables			Control Variables		
Average Number of Policy Alternatives Considered			Average Number of Policy Alternatives Considered in		
in Neighboring States for Tobacco (t)	1.07	*	Neighboring States for Vaccines (t)	.29	
	(.42)			(.38)	
Per Capita Health Expenditures	.11		Per Capita Health Expenditures	88	
	(.37)			(.55)	
Percent Democrat (t)	1.11	**	Percent Democrat (t)	.12	
	(.39)			(.33)	
Percent Liberal (t)	.92	**	Percent Liberal (t)	1.06	*
	(.29)			(.46)	
Democratic Strength	.09		Democratic Strength	1.00	**
	(.32)			(.37)	
			Percent Aged 19-35 Months Immunized for Various		
Percent Smokers	1.60	*	Childhood Diseases	003	
	(.74)			(.01)	
Smoking Attributable Mortality Rate	-1.26	*	Percent Aged 65+ Immunized for the Flu	.24	
	(.568)			(.37)	
Session Counter	.11	*	Session Counter	.13	**
	(.04)			(.05)	
Constant	.18		Constant	78	
	(.53)			(1.84)	

*Note* : All variables are normalized to range from 0 to 1. Significance levels as follows p < .05, \*\*p < .01, \*\*\*p < .001 with a two tailed test. Panel corrected standard errors shown in parentheses.



# Figure 1: Number of Different Policy Alternatives Introduced by State Legislative Session on Tobacco



# Figure 2: Number of Different Policy Alternatives Introduced by State Legislative Session on Vaccines