

# Policy Forum

INSTITUTE OF GOVERNMENT & PUBLIC AFFAIRS

## Smoking policy a local and state issue

### Do State Policies Affect Tobacco Sales to Minors?

By Bradley Gray and Frank J. Chaloupka

After rising dramatically through much of the early and mid-1990s, cigarette smoking among American adolescents has fallen steadily over the past several years. Nevertheless, each day more than 6,000 teens under age 18 try their first cigarette, with more than 3,000 of them becoming daily smokers. Motivated by concerns regarding youth smoking, federal and state policymakers have pursued a wide range of measures.

Much of the policy effort targeting youth during the 1990s focused on reducing youth access to tobacco products. State policies in this area were stimulated by the federal rule known as the Synar Amendment, passed in 1992, which required states to adopt laws prohibiting the sale or distribution of tobacco products to those less than 18 years of age and to demonstrate compliance with these laws. States were threatened with the loss of block grant funding if they failed to attain adequate compliance with these laws (although, to date, no state has actually been penalized). States adopted a number of policies, including establishing minimum ages for the sale of tobacco products (18 in most states, but higher in a few); prohibiting the purchase, possession, and use of tobacco products by minors; banning or greatly restricting vending machine sales of tobacco products; and more. Penalties for violation of



### Change Agents and the Strategic Pathways to Tobacco Ordinance Adoption

By Scott P. Hays, Carol E. Hays, John H. Vinzant

The Centers for Disease Control (CDC) Office of Smoking and Health calls cigarette smoking the single most preventable cause of death and disease in America. They estimate that the annual toll of deaths attributable to tobacco use is greater than the combined toll from AIDS, car accidents, suicides, homicides, fires, and illegal drugs. Each year, tobacco related diseases kill more than 19,000 Illinoisans. Research shows that 90 percent of lifelong smokers begin smoking before they are 18. According to the 2000 Illinois Youth Survey, the average age people first use tobacco is 13 and more than one-third of all Illinois high school seniors have smoked in the past 30 days.

While selling cigarettes to anyone under 18 is illegal in all 50 states, enforcement of these laws is sporadic at best. In any case, underage youth report little difficulty in acquiring cigarettes through a variety of means, including direct purchase from retailers. Growing numbers of municipalities around the country have passed ordinances that go beyond the laws of the state to increase the local regulation of tobacco use and sales.

In this article we present findings from our study of the passage of local tobacco control ordinances in 20 communities around the country. Ordinance adoption is ultimately a local process, but one with a key policy role

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*Do State Policies Affect* continued on page 2

*Change Agents* continued on page 4

these laws include fines and, in some cases, the suspension or revocation of a retailer's license to sell tobacco products.

In 1996, the federal government went further when the Food and Drug Administration (FDA) issued its regulations concerning the sale of tobacco products to minors. Under these extensive regulations, a national minimum sales age of 18 was established, with graduated penalties imposed on noncompliant retailers. In February 1997, the FDA began enforcing these regulations in a small number of states. By 1999, the enforcement program was expanded to include nearly all states. However, in March 2000, the U.S. Supreme Court ruled that the FDA had overstepped its authority by asserting jurisdiction over tobacco, and, consequently, its enforcement efforts ended.

Despite the numerous policies and substantial resources devoted to reducing youth access to tobacco products, these products are still readily available to teens. In fiscal year 2000, only half of all states had attained the 20 percent noncompliance rate established as a target under the Synar Amendment. Similarly, the FDA reported a 29 percent national violation rate from the compliance checks it conducted in 2000. State noncompliance rates for the period from August 1997 through March 2000 varied from a low of 9 percent in Maine to a high of 53 percent in Georgia. While declining somewhat since 1996, 68 percent of 8th graders and 86 percent of 10th graders report that it would be "fairly

easy" or "very easy" for them to get cigarettes if they wanted.

The research examining the impact of these restrictions on youth access provides mixed evidence concerning their effectiveness in improving retailer compliance, in reducing the availability of tobacco products to youth and, ultimately in reducing youth smoking. Two studies of community-based efforts have shown modest effects of enforcement of merchant compliance laws on youth tobacco use. In both cases these efforts limited increases in minors' tobacco use. These

efforts included, but were not limited to, law enforcement and retailer education. Studies utilizing data from large population surveys yield mixed evidence on the impact of youth access laws. These studies compare youth tobacco control policies and youth tobacco use controlling for other tobacco control efforts such as cigarette taxes. Importantly, none of these studies examined the impact of laws during the period of our analysis, when compliance checks were likely to increase the impact of these laws on sales to minors.

This paper uses the FDA compliance check data to examine the relationships between state policies targeting youth tobacco use, community characteristics, and retailer compliance using data from more than 100,000 compliance

checks conducted by the FDA between January 1998 and March 2000, merged with information on state policies and community characteristics. We find strong support for the contribution of strong state laws and regulations to reducing underage access to cigarettes.

## Methods

After claiming jurisdiction over tobacco products in 1996, the FDA contracted with states to conduct compliance checks under protocols prescribing such things as ages of the minor attempting the purchase, the procedures for conducting the purchase, and the handling of evidence. Rather than a random sampling of stores, compliance checks were performed to eventually complete a census of tobacco retail outlets. The FDA trained and commissioned adult investigators to perform the compliance checks. These investigators accompanied minors to the stores. Initially, the FDA contracted with a small number of states, with the number increasing over time. As a result, the number of compliance checks conducted also increased over time. Results of these compliance checks are posted on the FDA's web-site (<http://www.fda.gov/opacom/campaigns/tobacco/compliancechecker.html>). These data include: time and date of the check, the gender of the clerk, the store type (convenience store, convenience store with gas station, gas station only, drug store, supermarket, general merchandise, tobacco store, other) and the store ZIP code.

Compliance checks used in the analysis are limited to first checks conducted on stores in the sample and exclude those conducted during 1997. First compliance checks were used because a second or subsequent compliance check only occurred if the previous check resulted in an illegal sale.



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Checks from 1997 were excluded to reduce potential biases because state policies regarding minor access to tobacco products might have been related to the FDA choice of which states to begin compliance checks. Despite these exclusions our data set is very rich, containing information on more than 100,000 checks in 45 states and the District of Columbia.

Using the information on the zip code of each store in the FDA compliance checker database, we matched local community characteristics obtained from the Geolitics database to the store-level compliance check data. We added measures of racial and ethnic makeup of the community, economic status (average household income), urbanicity (urban versus rural), and age composition of the community.

Finally, we merged state level indicators of policies targeting youth access to and use of tobacco products that were in place by 1998. Two alternative approaches were employed. The first uses a single measure we call the youth access index (YAI), which reflects the comprehensiveness of state policies targeting youth tobacco use. The second measure replaces this index with a set of variables indicating whether or not a state had particular laws targeting youth access and use of tobacco. The advantage of the first measure is that it summarizes numerous laws and their extensiveness in a single measure. The advantage of the second measure is that it allows for the examination of specific policies thought to be particularly important predictors of youth access.

The youth access index is constructed by summing scores in several different categories of policies. Higher scores indicate more stringent state regulations. For example, a state gets a score of 0 if the minimum age is above 18; a score of 3 if the minimum age is 18 but there is no signage requirement and/or there is no specific penalty for failure to post a sign; a score of 4 if the minimum age is 18 with specific sign posting requirements and penalties for failure to post; and a score of 5 if there is minimum age below 18 and there are posting and penalty provisions. These points are then summed across the categories to get a total access index. The total points for each state are reduced by two points in each category if they bar local governments from adopting policies stricter than that of the state (preemption). As a final adjustment, we normalize the index by dividing it by the average sum across all states in our data. Thus, a value of 1.1 for a given state implies that the value of the

index for that state is 10% above the average index value for all states in the sample.

The set of state law indicators used as an alternative consists of six variables, indicating whether the state had each law or regulation in place by 1998 and zero otherwise. These indicators include:

- Whether the law designates a specific agency, department, office or governing body responsible for enforcing the law,
- Whether retail licenses may be suspended or revoked for sale of tobacco products to minors,
- Whether purchase of tobacco by minors is prohibited,
- Whether possession of tobacco by minors is prohibited,
- Whether the law requires signs to be displayed that describe the law, and,
- Whether the minimum legal age for purchase of tobacco products is nineteen rather than eighteen.

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## Results

There is a large negative association between all six of our policy measures and the likelihood of an illegal sale. Furthermore, the magnitude of these results suggests that they have important policy implications. For example, compliance checks in states with signage laws were more than 3 percentage points less likely to result in an illegal sale than in states without signage laws. This corresponds with a reduction in relative risk of a sale of about 12 percent. An even larger reduction in illegal sales, 5 percentage points, occurred for states with laws designating a specific agency, department, officer or governing body responsible for enforcing laws regulating tobacco sales to minors. Our study also shows that the YAI index is considerably below average in locations where sales took place compared to locations where sales did not take place. In locations where sales took place, the YAI was about 10 percent lower than in states where sales did not take place.

Illegal sales are significantly more likely in ZIP codes with relatively large percentages of African-Americans, lower income and rural communities. For example, in store zip codes where sales took place, the percentage of the population that is African-American is nearly 15 percent greater than in store ZIP codes where sales did not take place. On the other hand, there seemed to be a negative relationship between Hispanic zip codes and illegal sales

(with Hispanic populations nearly 15 percent lower in stores with than without illegal sales).

To further explore the policy significance of our results, we simulate the probability of an illegal sale across the whole sample assuming that the normalized YAI is at its value for Michigan, the lowest value in the sample (0.20), and for Texas, the highest value in the sample (2.40), holding all other characteristic constant. This simulation indicates that, holding other characteristic constant, the odds of an illegal sale in Texas may be 36 percent less than the odds of an illegal sale in Michigan due to the higher YAI in Texas. This simulation indicates that, on average for all states, the odds of an illegal sale under the high Texas enforcement level would be 36 percent less than it would be under the low Michigan levels. To examine the significance of our second policy measure, we simulate the impact of having all versus none of the 6 state policies in place. This simulation indicates that, holding other characteristics constant, among stores in states with all our 6 policy measures in place there is 27 percent reduction in the odds of an illegal sale than in a state with none of these policy measures in place.

## Conclusions

This study is the first to use a large number of compliance checks conducted across the country to examine the impact of state policies on tobacco sales to minors. State policymakers can learn from this analysis that having a

combination of key policies and compliance checks may substantially reduce tobacco sales to minors through commercial outlets. Another lesson to be learned is that low income, rural, and African-American communities are particularly at risk for illegal sales to minors. Our findings point to the need to invest resources to reducing the high rate of illegal sales in these communities.

Previous research yields mixed evidence that policies regulating illegal sales to minors may be successful at reducing tobacco use. However, none of these studies occurred during the period of our analysis, when compliance checks likely increased the potency of the policies. In light of our findings, it is likely that these studies understate the impact of the policies on tobacco use by minors in an era of vigorous compliance checking. Alternatively, if these policies are not linked to compliance checks or other vigorous enforcement measures, our findings may overestimate the impact of policy on tobacco sales to minors.

The take home message from this analysis is that when combined with compliance checks, policies designed to add sting to prohibitions on tobacco sales to minors are associated with significant reductions in these sales. This study provides real evidence of the effectiveness of policies designed to reduce such sales. It also points to the need for special emphasis on enforcement in low-income, African American, and rural communities, where illegal sales are especially prevalent. ■

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### *Change Agents continued from page 1*

for legislators, state agency administrators, and state and national non-profit organizations that advocate for policy change and monitor policy implementation and enforcement. In our study, we refer to such entities as change agents. Change agents work from outside a given community and across many communities to help form policy. Change agents encourage the spread of a particular policy or policies; provide direct financial support to communities through grants or in-kind contributions of personnel, equipment, or office space; provide data and scientific studies; mobilize local volunteers; testify at hearings; and offer strategic political advice.

We assume that change agents already understand and appreciate the problem of youth smoking and choose to

do something about it. Our findings address the role that change agents have played in assisting communities with ordinance campaigns to strengthen restrictions on youth access to tobacco products.

Our study consisted of intensive, qualitative case studies of each of the 20 communities. The selected communities represented particular social, demographic, population, and regional characteristics and were selected from a database of 1,200 communities with local tobacco control ordinances. We gathered case study information by examining newspaper accounts, council meeting records, and telephone and on-site interviews with between five and 20 respondents in each community. The analysis presented here focuses on six of the eight communities that adopted youth access to tobacco

ordinances. Community names here are fictitious to preserve the confidentiality of those involved.

## How States Block Local Policy Change

The first role of change agents at the state level is in passing legislation that affects the ordinances local communities can adopt. In tobacco control, 29 states have adopted legislation that "pre-empts" local government from regulating various aspects of tobacco policy. In Illinois for example, the Clean Indoor Air Act (410 ILCS 80/1 et seq. 1989) pre-empts municipalities from the local regulation of smoking in public places. The result of clean indoor air pre-emption in Illinois is that, with the exception of schools, no public or private places in Illinois are required to be 100 percent smoke free. While communities in Illinois cannot regulate clean indoor air, they do have wide latitude in the regulation of youth access to tobacco products. Therefore, we will focus attention on youth access to tobacco ordinances in local communities.

In Illinois, an ordinance restricting youth access might establish a purchase age of 18 years old (locally codifying Illinois state law), set a required number of annual local compliance checks by police (three are recommended), ban the sale of cigarettes through vending machines, require that tobacco products be placed behind the sales counter only, increase the fines and punishments on retailers for selling to underage youth, create local licensing of tobacco vendors, or prohibit the possession of tobacco products by youth (locally codifying Illinois state law). In a 1991 *Journal of the American Medical Association* article on youth access in Woodridge, Illinois, Leonard Jason finds that the greatest reduction of youth smoking rates comes from passing a local ordinance that includes all of the above components and actively enforcing it. However, most communities strengthen their ordinances in incremental steps. Our study examined the political process of passing ordinances with any or all of the above provisions. We define a stronger ordinance as one that expands on the baseline codified in the state law by adding two or more of the above provisions, particularly retail licensing with higher retail fines. A weaker ordinance does not expand on state law or only enacts provisions concerning youth possession of tobacco.



## Strategic Pathways to Ordinance Adoption

If change agents are to be effective, they must understand how the local ordinance adoption process operates. Table 1 summarizes the primary characteristics of the campaigns in six communities that adopted youth access ordinances. Our primary finding is that youth access ordinance campaigns have followed one of three "strategic pathways" to ordinance adoption. We refer to these as the Strategic Planning Pathway, the Youth Initiative Pathway and the Council Maverick Pathway.

In the Strategic Planning Pathway (Bison City and Riverbend in Table 1), an existing community coalition, typically led by the public health department, was the catalyst for the campaign. The group assessed community readiness, stimulated community education about the youth

tobacco problem, collected the necessary data, and assessed council support. This politically savvy and systematic approach defines the Strategic Planning Pathway. In the Youth Initiative Pathway (Palm Village and Ruthburg), a community youth group drives the ordinance campaign, either working on their own or

with an established coalition. In these communities, youth were important participants in the campaign, conducting compliance checks and demanding the support of local policymakers. Youth can be particularly convincing when testifying before council. The central role of youth in initiating and participating in all phases of the ordinance campaign defines the Youth Initiative Pathway. Youth organizations were not involved in the campaigns in any of the other four cities. In contrast, with the Council Maverick Pathway (Helmsley and Cliff City), the process began with a single council member who, without the support of any organized community coalition, became personally concerned with youth smoking and single-handedly championed the ordinance to adoption. A single council member promoting the ordinance and lobbying colleagues in favor of its passage defines the Council Maverick Pathway.

## Strategic Pathways and Change Agent Roles

While their importance and the centrality of their involvement varied greatly, change agents were involved in each of the 20 communities we studied, playing different roles in each of the pathways followed. First, change

agents provided funding as an incentive for local health departments to form coalitions and focus on tobacco control. The genesis for the Strategic Planning Pathway followed in two communities was grant funding to the public health department to organize and embark on an ordinance campaign. In Bison City, the Strategic Planning Pathway was led by a regional public health coalition funded with an ASSIST (American Stop Smoking Intervention Study) grant from the National Cancer Institute. In Riverbend, the effort was led by a county public health coalition funded through a Center for Disease Control PATCH (Planned Approach to Community Health) grant in 1991, and also a 1997 grant from the state to engage in policy change.



In the Youth Initiative Pathway communities, this type of funding played a more circumscribed role. In Palm Village, the coalition that worked with the youth group was formed with funding through a state tobacco tax increase to build a community anti-tobacco coalition. In Ruthburg, an ASSIST grant supported a regional coordinator of the American Cancer Society who stimulated youth interest in pursuing a youth access ordinance campaign. Outside grant funding was not important among communities that followed the Council Maverick Pathway.

Change agents also provided data and scientific studies to many of these communities to facilitate adoption. This is the primary role for national advocacy groups like the cancer society, the American Lung Association and the American Heart Association. Typically, they have the most recent data on smoking-related illness and death and can provide this data to coalitions or to city council members. Change agents acted as a clearinghouse for data to our study communities. This was particularly helpful to the council maverick in Helmsley, since he initiated the campaign spontaneously, without the support or motivation of a community coalition. In contrast, the council maverick in Cliff City had no change agent involvement, and adopted an ordinance that was limited to a substantial increase in the fines for youth possession of tobacco, despite the initial introduction of a strong and comprehensive ordinance.

Change agents also provided strategic advice. National organizations often have state or regional policy specialists who have some experience working on policy change efforts. In many of these communities, policy specialists offered strategic advice to coalitions. In fact, change agents played this role to varying degrees in all three pathways, but primarily in Helmsley, Ruthburg, and Riverbend. In

Helmsley, they worked directly with the council maverick. The regional coordinator in Ruthburg gave a presentation on youth access to tobacco that prompted the youth group to move forward with the campaign. In Riverbend, state agency personnel provided advice during site visits, including providing the coalition with a model ordinance they forwarded to city council when they initiated their campaign.

Finally, change agents testify at city council hearings. Although they may be perceived as outsiders, such organizations can lend credence to local organizations by showing that they have the blessing and support of large and reputable state or national organizations. This testimony was particularly important for the council maverick in Helmsley, but change agents testified in each of the study communities. In Cliff City, this was the only role played by the change agent.

## What Change Agents Can Do: A Summary

From the perspective of policy outcomes, Table 1 suggests that there is no "right" pathway to successful adoption of a comprehensive youth access tobacco control ordinance. For example, the ordinance adopted through the Strategic Planning Pathway by the highly organized local public health coalition in Riverbend was much weaker than the ordinance pushed through by the passionately committed council maverick in Helmsley. However, further analysis not presented here suggests that policy outcomes depend much more heavily on the socioeconomic status of the community and the level of political support rather than the specific pathway undertaken. Politically conservative communities of lower socio-economic status present the most resistant context for tobacco regulation. By these criteria, Riverbend, Ruthburg and Cliff City all presented a resistant context for ordinance adoption from the outset. They in fact adopted among the weakest ordinances. Whatever pathway the campaign takes in a given community, change agents must be prepared to provide the most effective assistance and support possible to local tobacco control advocates.

Our study shows how change agents can promote and facilitate local ordinance adoption. To support communities in their efforts to strengthen the restrictions on youth access to tobacco:

- State policymakers can work to revoke state pre-emption laws and thus allow communities to pursue ordinance options that best meet their own tobacco control needs.

**Table 1. Tobacco Ordinance Pathways, Change Agent Roles and Outcomes, Selected Cases**

Pathway	City*	Genesis	Change Agent Role	Outcome
Strategic Planning	Riverbend	Coalition led by public health gets grant from state program	Federal "IMPACT" grant awarded several years earlier State provided \$5,000 grant and technical assistance. State personnel testified at council hearing	Weak ordinance: Mimics state law, but reduces fine structure on retailers and youth (for possession)
	Bison City	Regional coalition led by public health is formed with grant from ASSIST  The ordinance began after a compliance check study showed a need	Awards ASSIST grant  ACS involved; testified at hearing	Strong ordinance: Self service display ban Youth possession Retail Licensing
Youth Initiative	Palm Village	Public health department forms anti-tobacco coalition through state tobacco grant; Youth group focuses coalition attention on tobacco	Received funds from State Department of Health Services from a tobacco tax	Somewhat strong ordinance: Bans self-service displays Bans vending machines Establishes progressive fines for businesses
	Ruthburg	Effort begun by local youth group (under United Way)	ACS addressed youth group and provided advice and information from other communities  Testified at council hearing	Somewhat strong ordinance: Restricts vending machines Bans self-service displays Youth possession added Progressive fines
Council Maverick	Helmsley	Initiated and led by council member	ACS and ALA provided strategic advice and information and testified at hearing; ALA reluctant to support possession component.	Strong ordinance: Requires 3 compliance checks Progressive fines for businesses
	Cliff City	Initiated by council member	Very limited role: AHA only testified briefly in support of ordinance at meeting	Weak ordinance increases fines on youth possession

\* These community names are pseudonyms

- State and national policymakers, along with private foundations, can provide funding for community organizing to address tobacco control issues.
- Public health officials, and others, can facilitate the spread of information about policy adoption and other communities' experiences with the policy change process.
- Research organizations, and others, can provide communities with the latest data, studies, facts, and other resources from national sources.
- Advocacy groups, and others, can provide model ordinances to communities to stimulate interest in ordinance adoption.
- Private consultants, and others, can provide advice on strategic planning and political strategies for policy change.
- Administrators can release the time of state or local staff to help organize coalitions and to support local ordinance campaigns.

## Conclusions

While there are several pathways to tobacco ordinance adoption, the preferred pathway is the Strategic Planning Pathway, but incorporating elements of the other two. That is, an existing and ongoing tobacco control coalition should carefully organize and plan any policy change campaign, but youth involvement is very important for policy change efforts that directly impact them. Also, having a passionate and committed council member to champion the policy is always beneficial, and the support of an organized community coalition creates a symbiosis that heightens the effectiveness of any policy change effort and better ensures effective implementation and enforcement later. Change agents should encourage and support communities to organize and follow the Strategic Planning Pathway, but they should be prepared to respond when youth groups or council members spontaneously embark on policy change efforts.

Although ordinance adoption is a local policy decision and a local process, state policymakers and state or national

organizations can and do have an important role in helping these local campaigns. In fact, as Cliff City illustrates, without some level of outside support, a community may find policy change a daunting process to undertake. ■

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