

# Legislators' Views on Tobacco Policy: Are There Regional Differences in Kentucky?

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## ABSTRACT

**Background.** Tobacco-growing states have few tobacco control laws, which are relatively weak compared with those in non-tobacco-growing states. Region of the country has been shown to be a predictor of legislators' intentions to vote for cigarette tax increases.

**Methods.** A total of 116 lawmakers (84%) participated in face-to-face interviews before the 1998 Kentucky General Assembly. Five regions of Kentucky were identified by the five political caucuses. Legislative voting records on two tobacco control bills introduced during the 1998 Kentucky General Assembly were examined.

**Results.** There was little regional variation in opinions toward tobacco control policy among Kentucky legislators. Regional variation was evident only in relation to reducing the state's dependence on tobacco production, raising cigarette taxes, and adopting a law to prohibit teen possession of tobacco products.

**Conclusions.** Health advocates from tobacco-growing states might use regional information to garner support for selected tobacco control policies among lawmakers.

STATES IN THE SOUTH are among those with the highest prevalence of tobacco use and the largest amount of tobacco produced in the United States. Compared with the other states, the four major tobacco-growing states are among those that lead the nation in the percentage of adults who smoke cigarettes. In 1998, Kentucky, North Carolina, Tennessee, and Virginia exceeded or matched the US adult smoking rate of 23% (31%, 25%, 26%, and 23% respectively).<sup>1</sup> These four states also lead the nation in tobacco production. In 1998, Kentucky, North Carolina, Tennessee, and Virginia produced a total of 1.2 billion pounds of tobacco (444, 552, 111, and 96 million pounds, respectively).<sup>2</sup>

Given tobacco's stronghold on the economy of these states, congressional lawmakers from tobacco-growing states are less likely to vote in favor of tobacco control legislation.<sup>3</sup> Moreover, Kentucky legislators who own tobacco allotments are less likely to favor a wide range of tobacco control laws.<sup>4</sup> They also are less likely to support farm diversification and agricul-

tural infrastructure measures to reduce the state's dependence on tobacco. The purpose of this study was to determine whether Kentucky legislators' opinions on tobacco control policy and their voting behavior on two tobacco control bills during the 1998 Kentucky General Assembly differed by region. Given that the political climate in Kentucky is similar to that in southern and border states,<sup>5</sup> the results of this study may be relevant to tobacco-growing states in the southern region.

Comprehensive tobacco prevention and control includes the development of laws and policies that have the potential to reduce tobacco-related morbidity and mortality by influencing the social, political, and economic environment. The price of cigarettes has a direct effect on smoking prevalence.<sup>6</sup> It is esti-

## KEY POINTS

- One hundred sixteen lawmakers (84%) serving in the 1998-1999 Kentucky General Assembly participated in the interviews.
- There was regional variation only in relation to reducing the state's dependence on tobacco production, raising cigarette taxes, and adopting a law to prohibit teen possession of tobacco products.
- Health advocates in Kentucky might first look to lawmakers from Jefferson County and the Mountain region to find support for cigarette tax increases.
- Since taxing all tobacco products at the same rate had the most support across all regions of Kentucky, this tax policy issue deserves particular attention.

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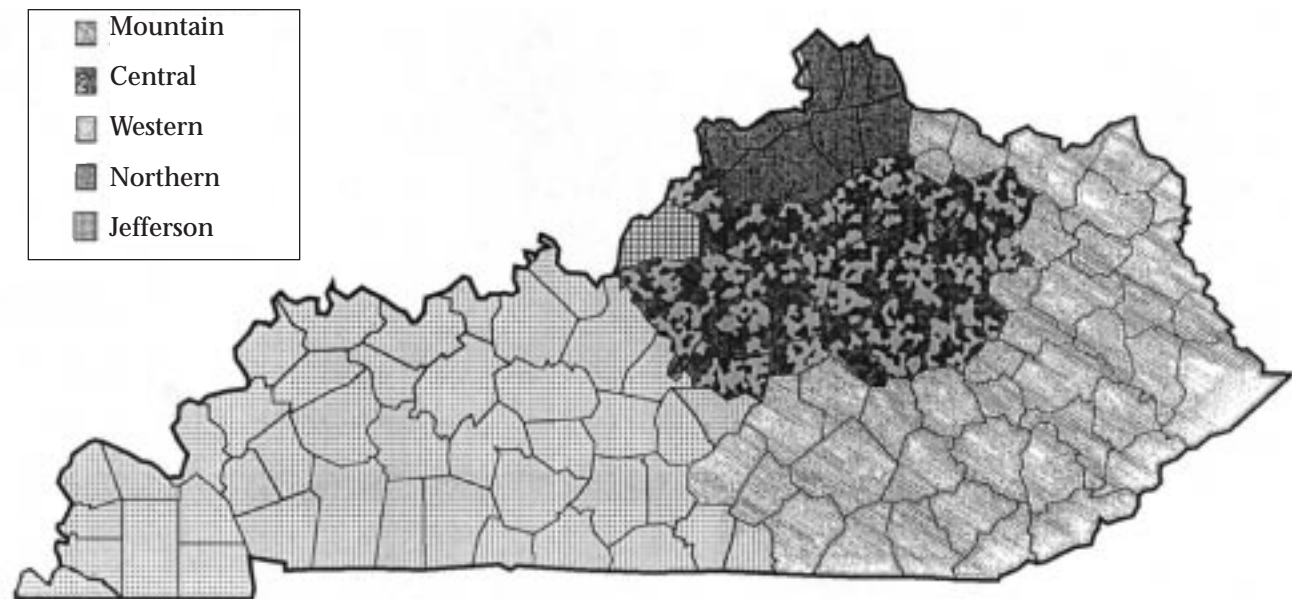


FIGURE 1. Five political caucuses in Kentucky.

mated that a 10% increase in cigarette prices results in a 4% reduction in smoking.<sup>7</sup> Policies that assist tobacco farmers in reducing their dependence on tobacco by diversifying their crops are increasingly being recognized as an important tobacco control strategy.<sup>8</sup> In addition, the farm community is becoming more open to considering support for public health measures. The majority of farmers favor increasing the cigarette excise tax if the revenues are earmarked for farm diversification efforts.<sup>9</sup> Some public health professionals in tobacco-growing states recognize the potential for political gain by partnering with the farm community on tobacco policy issues. Altman<sup>10</sup> called on both health activists and farmers to disregard long-held stereotypes and to work toward finding feasible tobacco policy options.

In a study of legislators from North Carolina, Texas, and Vermont, region of the country (ie, state) was a powerful predictor of legislators' intentions to vote for cigarette tax increases.<sup>11</sup> Flynn et al<sup>11</sup> selected these states because of major differences in both their tobacco production economy and the strength of their tobacco control policies. Compared with North Carolina lawmakers, legislators in Vermont were almost 22 times more likely and Texas legislators were almost 10 times more likely to intend to vote for cigarette tax increases. Legislators differed by region in their shared values and readiness to support tobacco control policies. Studies of other policy issues have shown clear regional variation within states. In Illinois, there are regional differences in policies that allocate state

dollars for education, highways, operations, and public aid.<sup>12</sup> Within-state regional variation in political climate<sup>13-15</sup> and ethnicity and culture<sup>15</sup> has been well described in the literature.

Kentuckians who support tobacco control policies are more likely to have a college education, to have no financial ties to tobacco farming, and to be nonsmokers. In a study of state legislators and the public, Kentuckians with a college education were twice as likely to favor cigarette tax hikes and four to five times more likely to favor workplace and restaurant smoking restrictions than those without a college degree.<sup>16</sup> Tobacco allotment owners and tobacco users were less likely to support cigarette tax hikes and local option to curb teen tobacco use compared with nonowners and nonusers.<sup>16</sup> In Indiana, however, Torabi et al<sup>17</sup> found no relationship between education and opinions about raising cigarette taxes or smoking restrictions in public places.

Although there is wide variation by state and by issue, personal values and attitudes of legislators toward the issue are major determinants of voting decisions.<sup>18</sup> In one study, Oklahoma legislators reported that personal beliefs accounted for 63% of all voting decisions.<sup>19</sup> In the same study, Kansas lawmakers cited personal values as the primary influence when they voted on a cigarette tax increase.

#### METHODS

Cross-sectional data were collected from 116 legislators during the first round of a policy Delphi study. The policy Delphi method is a

TABLE 1. Example of a Set of Items From the Interview Guide

Type of Item	Item
Reliability	One of every four teenagers in Kentucky smokes cigarettes. In your opinion, how reliable is this statement? <i>Certainly Reliable</i> <i>Reliable</i> <i>Unreliable</i> <i>Very Unreliable</i>
Desirability	Even though it is illegal to sell tobacco products to those under 18, Kentucky's teenagers can easily buy tobacco products. How desirable is it for Kentucky to strengthen the current youth access law? <i>Very Desirable</i> <i>Desirable</i> <i>Undesirable</i> <i>Very Undesirable</i>
Feasibility	Kentucky could penalize store owners instead of clerks for selling tobacco products to children by imposing stiff civil penalties. How likely is it that the General Assembly would pass such a policy? <i>Very Likely</i> <i>Likely</i> <i>Unlikely</i> <i>Very Unlikely</i>

multistage process involving the initial measurement of opinions (first round), followed by data analysis, design of a new questionnaire, and a second measurement of opinions (second round).<sup>20</sup> For the purpose of the study reported here, only first round items were considered for analysis. A more detailed description of this method and the instrument used in this study appear in an earlier report from the larger study.<sup>4</sup> Voting records on two tobacco control bills from the 1998 Kentucky General Assembly also were compiled.

Since policy decisions are often made at the political caucus level, five regions of Kentucky were identified based on the five political caucuses: Mountain, Central, Western, Northern, and Jefferson County (Fig 1). The population estimates in the five regions range from 393,348 in the Northern caucus to 1,088,094 in the Western caucus.<sup>21</sup> Since legislative district and political caucus boundaries did not always coincide, legislators who participated in more than one political caucus were assigned to the region that included the majority of the counties that they represented.

### Sample

A total of 116 lawmakers (84%) serving in the 1998-1999 Kentucky General Assembly participated in the interviews. The sample consisted of 22 legislators from the Mountain caucus, 32 from Central, 34 from Western, 9 from Northern Kentucky, and 19 from Jefferson County. Distribution of study participation in the five regions of the state ranged from 76% in Jefferson County to 91% in the Central region. The majority of the legislators interviewed were college-educated (74%), white (98%), and male (91%), with a mean age of 50.3 years (SD = 10.2). On average, they had served 7 years in the General Assembly (SD = 6.9). Of the total sample, 82 (71%) were House and 34 (29%) were Senate members. The sample was composed of 71 Democrats (61%) and 45 Republicans (39%). Participants and nonparticipants did not differ on

party affiliation or house membership (House vs Senate). Forty-seven (41%) had grown tobacco or leased tobacco allotments, but only 24 (21%) owned tobacco allotments at the time of the interview. Tobacco allotment owners either grow tobacco themselves or lease the property to others who grow the crop. Forty (35%) were tobacco users (cigarettes, cigars, pipes, and/or smokeless tobacco).

### Measures

The interview guide contained 57 items related to tobacco farming and tobacco control policy options (see Hahn et al<sup>4</sup> for details about the development of the interview guide; see Table 1 for sample items). Policy option items related to tobacco farming included opinions about farm diversification, agricultural infrastructure, and the federal price support program. Tobacco control items included issues/policies related to youth access, clean indoor air, marketing/advertising, smoking cessation, excise taxes, and litigation. Legislators rated the reliability of information related to these tobacco policy options using a 4-point Likert scale ranging from *certainly reliable* to *very unreliable*. Next, they were asked their views on the desirability and feasibility of these policy options using a similar scale ranging from either *very desirable* to *very undesirable* or *very likely* to *very unlikely*. The four response categories on the opinion items were combined into "generally positive" and "generally negative" for ease of interpretation.

Data also were obtained on age, sex, race, time served in the General Assembly, education, tobacco use, experience with growing/leasing tobacco, and political party affiliation. Median tobacco production was obtained on a per legislator basis by determining the 50th percentile of tobacco production (in pounds produced) among all the counties represented by that legislator.

Voting records from the 1998 legislative session were obtained from the Kentucky Legislative Research Commission to determine vot-

**TABLE 2.** Significant Associations Between Region and Opinions Toward Tobacco Policy Items

Item	Mountain		Central		Western		Northern		Jefferson	
	Generally Positive	Generally Negative	Generally Positive	Generally Negative	Generally Positive	Generally Negative	Generally Positive	Generally Negative	Generally Positive	Generally Negative
	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)
Feasibility of low interest loans for diversification	13 (59%)	9 (41%)	19 (59%)	13 (41%)	7 (21%)	27 (79%)	6 (67%)	3 (33%)	12 (63%)	7 (37%)
Feasibility of raising taxes to support diversification	10 (45%)	12 (55%)	9 (28%)	23 (72%)	5 (15%)	29 (85%)	3 (33%)	6 (67%)	10 (53%)	9 (47%)
Feasibility of using state cigarette taxes for cessation	3 (14%)	19 (86%)	1 (3%)	31 (97%)	4 (12%)	30 (88%)	2 (22%)	7 (78%)	6 (32%)	13 (68%)
Desirability of taxing all tobacco products at the same rate	11 (50%)	11 (50%)	17 (53%)	15 (47%)	24 (73%)	9 (27%)	6 (67%)	3 (33%)	18 (95%)	1 (5%)

*P* < .05 for tests of association on these items.

ing behavior on two tobacco control bills: House Bill 381 and House Bill 561. House Bill 381 was originally designed to permit local governments to enact more stringent standards related to youth access to tobacco products but was amended in committee to establish a Task Force on Teens and Tobacco. Although HB 381 passed the House 70-23 (yes = pro-tobacco control), it died in the Senate Agricultural Committee. House Bill 561 prohibited possession or use of tobacco products by minors. The bill 561 was tabled on third reading by a vote of 51-43 (no to table = pro-tobacco control). Although these two bills were weak attempts at addressing youth tobacco use, they were viewed by public health advocates as steps in the right direction for Kentucky. Three other tobacco control bills could not be considered because of lack of variability in voting, death in committee, and multiple amendments and procedural changes.

### Procedure

In-person interviews were conducted by an experienced male interviewer in the legislators' offices during May through September 1997. The data were analyzed using both descriptive and inferential statistics. A tobacco production score was developed for each legislator by determining the median tobacco production in all counties represented by the legislator. Means and standard deviations were used to summarize continuous measures, and frequency distributions were obtained for categorical data. Associations of region with categorical measures (eg, political party, sex) were determined using chi-square analysis or Fisher's exact test, as appropriate. Relationships between region and continuous measures (eg, age, years in the General Assembly) were as-

sessed using the F statistic in the context of one-way analysis of variance. Post hoc comparisons were obtained using Fisher's least significant difference procedure; differences with *P* < .05 were considered significant. Logistic regression was used to determine whether region predicted opinions (positive/negative) and voting behavior (for/against), controlling for median tobacco production. Separate models were developed for each of the 57 opinion items and the two tobacco control bills. Median tobacco production was included as a control variable because of striking differences in pounds produced by region. Region was included in each model as a series of four dichotomous variables (Mountain region, Central Kentucky, Western Kentucky, or Northern Kentucky), with Jefferson County as the reference region. The log-likelihood chi-square test was used to determine the overall significance of each logistic model.

### RESULTS

The relationship between region and each of the following demographic characteristics was not significant (*P* > .05 in each case): race, sex, age, years of formal education, house membership (ie, House vs Senate), political party, years served in the General Assembly, tobacco use, and tobacco allotment ownership. However, average tobacco production scores differed by region (*F* = 28.5, *P* < .0001). Legislators from the Central region had the highest tobacco production scores, while legislators from Jefferson County had the lowest median tobacco production (Fig 2). The average tobacco production score among legislators from the Central region was significantly greater than in all other regions. The Western region also produced

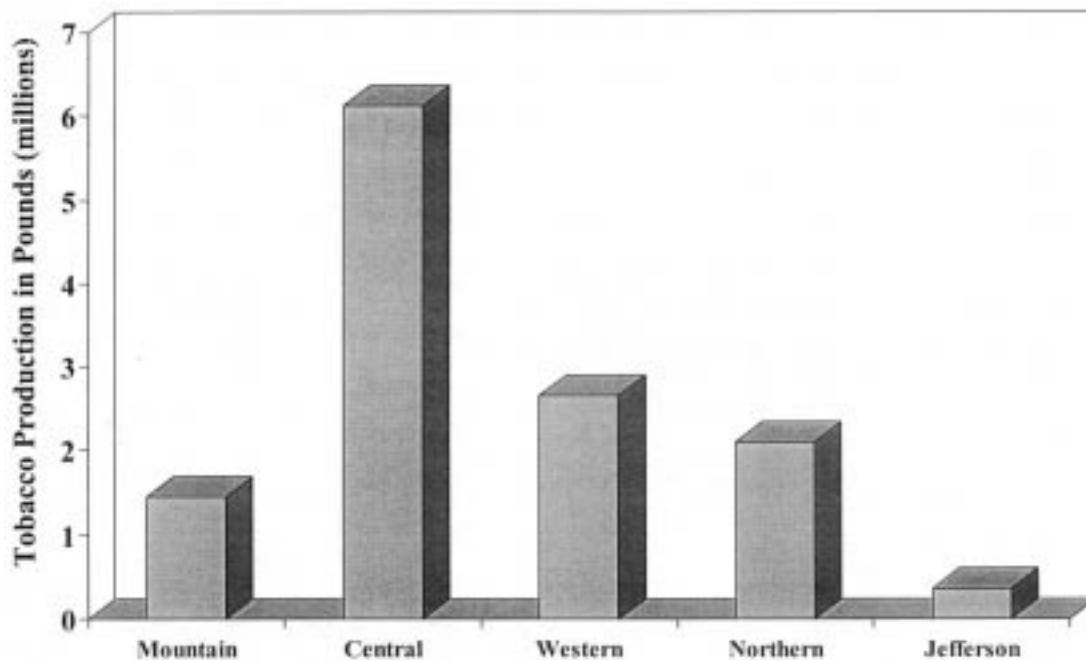


FIGURE 2. Average tobacco production scores by region (N = 116).

more tobacco than either the Mountain region or Jefferson County. Similarly, tobacco production in Northern Kentucky was significantly greater than in Jefferson County. Jefferson County produced significantly less tobacco than all regions except for the Mountain region. Since none of the demographic characteristics were associated with region, only the tobacco production score was used as a control variable in the logistic models.

Legislators' opinions about 32 policy option items related to youth access, clean indoor air, marketing/advertising, smoking cessation, and litigation did not vary by region. Only two of the 13 items related to tobacco farming varied by region: the likelihood of providing low interest loans for farm diversification ( $\chi^2 = 18.1, P = .003$ ); and the belief that farmers could be successful growing crops other than tobacco by establishing a comprehensive marketing system to support the production of other commodities ( $\chi^2 = 11.6, P = .04$ ) (Table 2). Approximately two thirds of lawmakers from Northern Kentucky and Jefferson County agreed it would be feasible for the state to provide low-interest loans to assist farmers to supplement their income with other crops. Western Kentucky lawmakers were the least likely to think this was feasible, with less than one fourth of them positive toward this policy. Similarly, lawmakers from Northern Kentucky, the Mountain region, and Jefferson County were most likely to believe that farmers could be successful at growing alternative crops by establish-

ing a commodity marketing system, and Western and Central Kentucky legislators were least likely to rely on this information as true.

Of the 12 opinion items related to cigarette tax policy, three had significant logistic models when regressed on region, controlling for median tobacco production. When considering raising the cigarette tax for farm diversification, a larger percentage of Mountain region and Jefferson County lawmakers thought the General Assembly would pass such a policy as compared with the percentage of Western and Central legislators ( $\chi^2 = 12.5, P = .03$ ). Similarly, a higher proportion of lawmakers from Northern Kentucky and Jefferson County thought that raising the tax to improve agricultural infrastructure was feasible, compared with Western Kentucky legislators who were the least likely to support this idea ( $\chi^2 = 11.7, P = .04$ ). While most Kentucky lawmakers in all regions did not think it was feasible to raise the cigarette tax for farm diversification, the comparisons reported here show differences in the relative degree of support by region. In regard to taxing all tobacco products including smokeless tobacco at the same rate, Western and Jefferson County lawmakers were most likely to support this idea, and Mountain and Central Kentucky legislators were least likely to favor taxing all tobacco products at the same rate ( $\chi^2 = 14.8, P = .01$ ). While most legislators supported taxing all tobacco products at the same rate, the degree of support varied significantly by region.

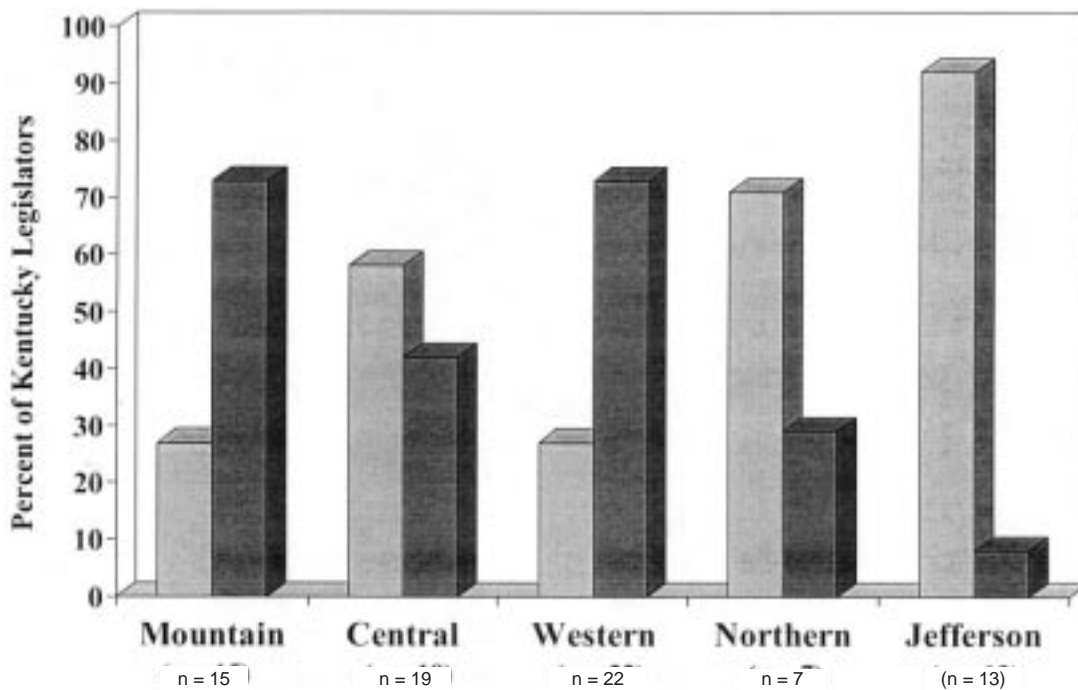


FIGURE 3. Voting behavior by region (N = 76). Light bars indicate votes for House Bill 561, dark bars show votes against.

There were no regional differences in voting on HB 381, a bill to establish a Task Force on Teens and Tobacco. After controlling for median tobacco production, legislators did differ by region in their voting on HB 561, a bill to prohibit possession or use of tobacco products by minors ( $\chi^2 = 22.7, P = .004$ ) (Fig 3). Similar to their opinions about tobacco control policy, lawmakers from Jefferson County and Northern Kentucky were most likely to vote for HB 561. Mountain and Western lawmakers were least likely to vote in favor of prohibiting teen possession, with only 27% voting for HB 561.

#### DISCUSSION

Although a large number of tobacco policy issues were considered in this study, we found regional variation among Kentucky legislators in opinions toward only a small number of tobacco control policy issues, after controlling for median tobacco production in the counties represented by each lawmaker. Only five of the 57 interview items reflected differences in opinion by region, indicating a striking similarity in views toward tobacco policy among legislators from across the state. There was, however, regional variation on voting for one of two tobacco control bills considered during the 1998 Kentucky General Assembly.

Regional variation was evident only in relation to reducing the state's dependence on tobacco production, raising cigarette taxes,

and adopting a law to prohibit teen possession of tobacco products. Overall, most support for tobacco control policies came from Jefferson County, followed by Northern Kentucky, Mountain, Central, and Western Kentucky, even when controlling for differences in regional tobacco production. Regional differences in support for tobacco control policies also may be related to the tobacco culture, urban vs rural differences, or other issues not studied here.

As a group, members of the 1998 Kentucky General Assembly who participated in this study were highly supportive of lessening the state's dependence on tobacco and were more favorable toward tobacco control policies than expected.<sup>4</sup> Jefferson County lawmakers were supportive of tobacco control policies, even after adjusting for differences in tobacco production by region. Legislators from Jefferson County were consistently the most favorable toward reducing the state's dependence on tobacco production as well as adopting cigarette tax increases. Northern Kentucky lawmakers, like their Jefferson County counterparts, favored measures to reduce the state's dependence on tobacco production. While two thirds thought Kentucky should tax all tobacco products at the same rate, only one third thought it likely that Kentucky would raise cigarette taxes to reduce its dependence on tobacco. Legislators from the Mountain re-

gion also were favorable toward reducing the state's dependence on tobacco. Second only to Jefferson County legislators, almost half of Mountain lawmakers thought raising taxes to support farm diversification and agricultural infrastructure was feasible. Legislators from the Central and Western regions were less likely to support measures to reduce the state's dependence on tobacco and less likely to think the General Assembly would raise the cigarette excise tax.

Raising the cigarette tax is an effective public health intervention. Cigarette tax increases are associated with declines in tobacco consumption.<sup>22-24</sup> Both adult and teen smokers reduce their consumption of cigarettes and consider quitting when cigarette taxes are increased.<sup>6</sup> Raising the cigarette tax and using the funds to reduce the states' dependence on tobacco production is a particularly desirable policy in a state like Kentucky that is economically tied to the product and has the highest smoking prevalence in the nation. Based on the findings of this study, health advocates in Kentucky might first look to lawmakers from Jefferson County and the Mountain region to find support for cigarette tax increases. Interestingly, Western Kentucky lawmakers were among the most favorable toward taxing all tobacco products at the same rate, the only policy issue area for which they showed support. Health advocates might start with this tax policy change, since it would seem to have the most support across all regions of the Commonwealth. Given the similar tobacco use and production profiles of other southern states, the results of this study with Kentucky legislators also may apply to the other tobacco-growing states.

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