

UC Office of the President

UCOP Previously Published Works

Title

Rating the effectiveness of local tobacco policies for reducing youth smoking

Permalink

<https://escholarship.org/uc/item/5m49r6gj>

Author

Lipperman-Kreda, Sharon

Publication Date

2014-04-01

Peer reviewed



Published in final edited form as:

J Prim Prev. 2014 April ; 35(2): 85–91. doi:10.1007/s10935-013-0336-x.

Rating the Effectiveness of Local Tobacco Policies for Reducing Youth Smoking

Sharon Lipperman-Kreda, Ph.D.¹, Karen B. Friend, Ph.D.², and Joel W. Grube, Ph.D.¹

¹Prevention Research Center, Pacific Institute for Research and Evaluation, 180 Grand Avenue, Suite 1200, Oakland, CA 94612, Fax: (510) 644-0594, Phone: (510) 883-5750, skreda@prev.org

²Decision Sciences Institute, Pacific Institute for Research and Evaluation, 1005 Main Street, Suite 8120, Pawtucket, RI 02860

Abstract

Important questions remain regarding the effectiveness of local tobacco policies for preventing and reducing youth tobacco use and the relative importance of these policies. The aims of this paper are to: (1) compare policy effectiveness ratings provided by researchers and tobacco prevention specialists for individual local tobacco policies, and (2) develop and describe a systematic approach to score communities for locally-implemented tobacco policies. We reviewed municipal codes of 50 California communities to identify local tobacco regulations in five sub-domains. We then developed an instrument to rate the effectiveness of these policies and administered to an expert panel of 40 tobacco researchers and specialists. We compared mean policy effectiveness ratings obtained from researchers and prevention specialists and used it to score the 50 communities. High inter-rater reliabilities obtained for each sub-domain indicated substantial agreement among the raters about relative policy effectiveness. Results showed that, although researchers and prevention specialists differed on the mean levels of policy ratings, their relative rank ordering of the effectiveness of policy sub-domains were very similar. While both researchers and prevention specialists viewed *local* outdoor clean air policies as least effective in preventing and reducing youth cigarette smoking, they rated tobacco sales policies and advertising and promotion as more effective than the other policies. Moreover, we found high correlations between community scores generated from researchers' and prevention specialists' ratings. This approach can be used to inform research on local policies and prevention efforts and help bridge the gap between research and practice.

Keywords

Tobacco policies; Youth smoking; Ratings; Measurement

Introduction

A compelling body of evidence suggests that tobacco policy interventions implemented at the state and federal levels, including increasing cigarette prices, conducting compliance checks, enforcing minor in possession laws, enacting indoor clean air laws, and restricting marketing and advertising, can reduce youth smoking (Botello-Harbaum et al., 2009; Carpenter & Cook, 2008; Centers for Disease Control and Prevention, 2007; Choi, Ahluwalia, Harris, & Okuyemi, 2002; DiFranza, Savageau, & Fletcher, 2009; Levy &

Conflict of Interest:

None

Friend, 2001a, 2001b; Paynter & Edwards, 2009; Tutt, Bauer, & Difranza, 2009; Wakefield et al., 2000). The effectiveness of many policies implemented at the local level, however, is less well understood (Friend, Lipperman-Kreda, & Grube, 2011). This paper addresses this gap by investigating the relative effectiveness of tobacco policies implemented at the local level and developing a systematic approach to rate communities in regards to their implementation of these policies. This approach can be used to measure local tobacco policy in order to investigate the associations between local tobacco policies and youth tobacco use. In the longer term, it can help to ensure that scarce resources and funds are used efficiently.

Previous efforts to rate the effectiveness of tobacco policies have been limited to those implemented at the state and federal levels (Alciati et al., 1998; Chriqui et al., 2002; Joossens & Raw, 2006; Levy, Cummings, & Hyland, 2000; Levy & Friend, 2001a; Levy, Friend, Holder, & Carmona, 2001; Levy, Friend, & Polishchuk, 2001; Levy & Friend, 2002). Important questions remain regarding the effectiveness of local tobacco policies for preventing and reducing youth use and the relative importance of these policies. It is unclear, for example, whether local outdoor clean air laws affect youth smoking or what the relative effectiveness of these policies is compared to other local policies such as prohibiting tobacco retail stores near schools.

In spite of the limited research regarding the effectiveness of local tobacco policies for preventing and reducing tobacco use, federal funding has been made increasingly available for communities to address tobacco problems locally. To this end, the Substance Abuse and Mental Health Services Administration's (SAMHSA's) mission is to fund community-based programs. One example is their Drug Free Communities (DFC) initiative, the goal of which is to increase community capacity to implement policies targeting factors that increase risk for substance abuse and to evaluate policy effectiveness. Prevention specialists may then use their experience and perspectives about policy implementation and effectiveness to address tobacco problems in their communities.

A wide gap between prevention research and practice remains (Birckmayer, Holder, Yacoubian, & Friend, 2004; Emshoff, 2008; Green, 2001; Levy & Friend, 2002). Often, discussion related to this gap has focused on getting practitioners to recognize and adopt empirically-based practices. We believe that it is equally important to integrate the experience of those who are implementing these policies (Green, 2008; Green & Glasgow, 2006). Researchers and prevention specialist, however, may have different perspectives about policy efficiency. Therefore, it is important to compare ratings and to explore how ratings obtained from researchers and prevention specialists may vary. In turn, these ratings can then be used to measure local tobacco policies in order to evaluate their effectiveness as a means to prevent and reduce youth cigarette smoking.

Local tobacco control policies may be particularly important for preventing and reducing youth smoking but studies of their empirical effects is in an early stage. Although preemption (i.e., a situation in which a law passed by a higher authority precludes a law passed by a lower one) may prevent local policy adoption in some states, many states, including California, allow local governments to implement tobacco policies as long as they are more restrictive than those enacted at the state level (Technical Assistance Legal Center, 2009, 2011).

This paper addresses two complementary goals, the first of which is to compare policy ratings provided by researchers and tobacco prevention specialists of individual locally-implemented tobacco policies. This comparison will allow us to highlight differences and similarities in perceptions of tobacco policy effectiveness by tobacco researchers and by

those responsible for policy adoption and implementation. Using these ratings, our second goal is to describe a systematic approach to score communities for tobacco policies implemented at the local level. This tool can be used in both research and applied settings to assist in evaluating local prevention efforts and to guide effective policy development and implementation.

Methods

Overview

We developed and tested an instrument designed specifically to rate the effectiveness of local tobacco policies in 50 mid-sized California municipalities. We selected the study sites, which are a part of our ongoing studies of local alcohol and tobacco regulation, using a purposive geographic sampling method to obtain 50 non-contiguous California cities with populations between 50,000 and 500,000 (Lipperman-Kreda, Grube, & Friend, 2012). This sampling method intended to maximize ecological validity of the study. We then identified all existing local tobacco ordinances in these communities and integrated them into a survey instrument. The instrument was pilot tested, revised, and then distributed to 18 tobacco control researchers and 22 prevention specialists who rated each policy for effectiveness.

Rating Scale Development

Identifying local tobacco policies: We obtained municipal tobacco codes of the 50 California communities from city websites or municipal code databases such as Code Publishing Inc. (n.d.), American Legal Publishing (n.d.) and Municode (n.d.). We reviewed these tobacco codes from April to August 2009 and updated in July 2010. We categorized the local tobacco ordinances under one of five policy sub-domains: (a) indoor clean air, (b) outdoor clean air, (c) smoke-free multiunit housing, (d) tobacco sales, and (e) advertising and promotion.

Pilot survey: We developed an instrument to rate the perceived effectiveness of the local tobacco regulations identified from the policy databases and of related state regulations. We pilot tested this instrument with a convenience sample of ten tobacco and alcohol policy experts (five researchers and five prevention specialists) and revised it based on their recommendations. Specifically, we revised items that were unclear or ambiguous, provided examples to assist raters, and simplified the scale format.

Final instrument: The final version of the instrument consisted of two parts. Part I included items designed to measure experts' beliefs about the importance of the various broad policy topics. Since we only used data from Part II to rate local tobacco policies, we focus on this part of the instrument in this paper. In Part II, we provided experts with summaries of existing California state laws and relevant local tobacco policies and asked them to rate them on a scale ranging from 1 (*not at all effective*) to 10 (*very effective*) as a means to reduce or prevent adolescent smoking. A copy of the complete instrument is available on our Research in Action website (<http://resources.prev.org>).

Expert Panel Review—We sent e-mailed invitations that described the purpose of the study to 52 experts (24 tobacco researchers and 28 tobacco prevention specialists). We selected U.S. researchers on the basis of their publications in the areas of tobacco control and youth smoking. We selected tobacco prevention specialists from local health departments in the 50 communities from which we had obtained the policy data. We offered a \$25 gift card to each researcher and prevention expert who completed the survey. We sent reminders to those who had not completed the survey two weeks and again three weeks after the first contact. Of the 52 experts, 40 responded to the survey, of whom 18 were tobacco

researchers and 22 were tobacco prevention specialists. The response rates did not differ significantly between the groups.

Results

Reliability

Interclass correlation coefficients (ICCs) were calculated to measure the inter-rater reliability or consistency among the panelists. Overall, we found a high degree of consistency. The ICCs from two-way random effect models (absolute agreement) were .93 for indoor clean air laws, .97 for outdoor clean air laws, .96 for smoke-free housing laws, .96 for sale of tobacco products, and .95 for advertising and promotion.

Descriptive statistics

Table 1 provides means and 95% confidence intervals for experts' ratings of the effectiveness of the local tobacco policies for discouraging youth smoking. Overall, both researchers and prevention specialists rated most of the policies as moderately to very effective. Not surprisingly, they rated more restrictive and broader policies (e.g., total bans on smoking in all parks) as more effective than less restrictive or narrower policies within the same domain (e.g., designated smoking areas or smoking bans in some parks only).

Comparison of policy ratings from researchers and prevention specialists

Overall, prevention specialists rated most of the specific policies as more effective for discouraging youth smoking than did researchers. Differences in the rank orders between the two groups were mainly in their rankings of partial clean outdoor air restrictions. Whereas researchers thought that designated smoking areas were less effective than prohibiting smoking in some but not all outdoor places, prevention specialists were less consistent in this regard (Table 1).

Experts' ratings across the items for each of the five policy sub-domains were averaged and independent-samples *t*-tests were conducted to compare researchers' and prevention specialists' ratings. Compared to researchers, prevention specialists rated as more effective local clean indoor air laws, $t(38) = -3.43, p < .001, \eta^2 = .24$, smoke-free multiunit housing laws, $t(38) = -2.52, p < .05, \eta^2 = .14$, sales restrictions on tobacco products, $t(38) = -2.38, p < .05, \eta^2 = .13$, and advertising and promotion restrictions, $t(38) = -2.92, p < .05, \eta^2 = .18$. The two groups' ratings of clean outdoor air laws did not differ, $t(38) = -1.75, ns$. Despite these differences, a repeated measures ANOVA with a Greenhouse-Geisser correction determined that the relative ordering by researchers and prevention specialists were similar across the five policy sub-domains, $F(3.15, 119.50) = 1.86, ns, \text{partial } \eta^2 = .05$.

Policy ratings of both researchers and prevention specialists, however, differed significantly among the tobacco policy sub-domains, $F(3.15, 119.50) = 57.71, p < .00, \text{partial } \eta^2 = .60$. Post hoc tests with a Bonferroni correction revealed that experts rated outdoor clean air laws as less effective than each of the other policy sub-domains (i.e., indoor clean air laws, $p < .001$; smoke-free multiunit housing policies, $p < .001$; sales of tobacco policies, $p < .001$; advertising and promotion, $p < .001$). Also, they rated sales of tobacco policies and advertising and promotion significantly more effective than indoor clean air laws and smoke-free multiunit housing policies (p values $< .001$ for all pairwise comparisons).

Scoring the 50 California communities

We also explored whether ratings obtained from researchers and prevention specialists yielded differences in policy assessments of local communities. For this purpose, we scored each of the 50 California communities on the overall comprehensiveness of their local

policies by summing the mean ratings across the specific local tobacco policy items (see Table 1). Thus, for example, a city that had 100% smoke-free parks would have received a score of 8.12 based on the ratings provided by researchers for this policy. If the city also had policy that prohibited all pharmacies from selling tobacco, additional score of 6.94 would have been given based on researchers' ratings. We then summed scores for each of the five policy sub-domains. We calculated separate community ratings for prevention specialists and for researchers.

Descriptive statistics of community scoring are presented in Table 2. As expected, mean levels of community scores were higher among prevention specialists across all five policy sub-domains. The confidence intervals for the community ratings by the two groups, however, overlapped substantially. We also looked at the correlations between the 50 community scores generated from researchers' ratings and those generated from specialists' ratings. The high correlations between the researchers' and specialists' sub-domain scores across communities ($r = .99$ to 1.00) indicate that, although the two groups differed as to their mean levels of policy ratings, the order of communities in terms of tobacco policy was very similar regardless of whose ratings were used.

Discussion

This paper compares the relative perceptions of local tobacco policy effectiveness by researchers and prevention specialists, and describes an approach to score communities' local tobacco policies. To our knowledge, no published study has compared researchers' and prevention specialists' beliefs about the effectiveness of local tobacco policies. Our results showed that prevention specialists rated most policies as more effective for discouraging youth smoking than did researchers. Despite these differences, we found that the two groups share similar perspectives about the *relative* effectiveness of the policies. That is, researchers and prevention specialists showed similar pattern in their rankings of the five policy subdomains. As a result, similar conclusions about the relative effectiveness of policies and the relative ranking of communities in terms of policy would be reached regardless of which group provided the initial ratings. Even though researchers and prevention specialists may come from very different perspectives, they appear to share a common understanding of which tobacco policies are most likely to be effective. These results imply that it may be sufficient for many community-level policy research or assessment needs to rely on a single source of data (i.e., community prevention specialists or researchers).

Focusing on policy effectiveness across sub-domains, both researchers and prevention specialists viewed *local* outdoor clean air policies as the least effective in preventing and reducing youth cigarette smoking. No previous study has evaluated the effectiveness of these policies. Also, tobacco sales policies and advertising and promotion were rated as more effective than the other policies. While previous studies, mostly at the state and federal levels, have shown that these policies are important in preventing and reducing youth cigarette smoking (Friend et al., 2011), further research is needed to address the immediate and long-term consequences of policies to restrict retail advertising and marketing displays (Friend et al., 2011; Henriksen, 2012).

Results of the present study should be considered in light of several limitations. First, due to the nature of our research, we limited our evaluation of local tobacco policies to their effectiveness for discouraging youth smoking. It is possible, for example, that different policy ratings would have been generated if they were evaluated relative to other important public health outcomes, such as discouraging adult smoking or increasing cessation rates. Second, because this study is part of a larger ongoing research project, the ratings were

limited to the local policies we identified in 50 California communities, which may limit the study's generalizability. Although California has very strong record of tobacco control, it is highly likely that other policies may be implemented in other states or local communities. Finally, although our experts were well-established and respected tobacco control researchers and prevention specialists, our sample may not have been representative of all such persons. Future studies may include more stringent participant inclusion criteria, such as number of years in the field for prevention specialists or number of tobacco-related publications for researchers. Even so, the very high levels of convergence on policy ratings achieved among our raters suggest that sampling was probably not a major threat to the validity of our conclusions.

Future studies should use and evaluate this approach to study the potential impact of local tobacco policies on youth and adult smoking behaviors and beliefs. Moreover, this approach can be generalized to other policy research and prevention areas such as alcohol, drugs, violence, and obesity. Researchers can also use this approach to rate policies and evaluate their impact for a range of outcomes. In the longer term, it can help to ensure that scarce resources and funds are used efficiently.

Acknowledgments

Funding:

This research and preparation of this paper were funded by grant CA138956 from the National Cancer Institute (NCI) and grant 19CA-016 from the Tobacco-Related Disease Research Program (TRDRP). The content is solely the responsibility of the authors and does not necessarily represent the official view of NCI or TRDRP.

References

- Alciati MH, Frosh M, Green SB, Brownson RC, Fisher PH, Hobart R, Shelton DM. State laws on youth access to tobacco in the United States: Measuring their extensiveness with a new rating system. *Tobacco Control*. 1998; 7(4):345–352. doi: 10.1136/tc.7.4.345. [PubMed: 10093166]
- American Legal Publishing Cooperation. Codes of Ordinances for California. n.d. Retrieved from <http://www.amlegal.com/library/ca/index.shtml>
- Birckmayer J, Holder HD, Yacoubian GS, Friend KB. A general causal model to guide alcohol, tobacco, and illicit drug prevention: Assessing the research evidence. *Journal of Drug Education*. 2004; 34(2):121–153. [PubMed: 15638215]
- Botello-Harbaum MT, Haynie DL, Iannotti RJ, Wang J, Gase L, Simons-Morton B. Tobacco control policy and adolescent cigarette smoking status in the United States. *Nicotine & Tobacco Research*. 2009; 11(7):875–885. doi: 10.1093/ntr/ntp081. [PubMed: 19443786]
- Carpenter C, Cook PJ. Cigarette taxes and youth smoking: New evidence from national, state, and local Youth Risk Behavior Surveys. *Journal of Health Economics*. 2008; 27(2):287–299. doi: 10.1016/j.jhealeco.2007.05.008. [PubMed: 18242745]
- Centers for Disease Control and Prevention. Best practices for comprehensive tobacco control programs—October 2007. Centers for Disease Control and Prevention; Atlanta, GA: 2007. Retrieved from http://www.cdc.gov/tobacco/stateandcommunity/best_practices/pdfs/2007/bestpractices_complete.pdf
- Choi WS, Ahluwalia JS, Harris KJ, Okuyemi K. Progression to established smoking: The influence of tobacco marketing. *American Journal of Preventive Medicine*. 2002; 22:228–233. doi: 10.1016/S0749-3797(02)00420-8. [PubMed: 11988378]
- Chriqui JF, Frosh M, Brownson RC, Shelton DM, Sciandra RC, Hobart R, Alciati MH. Application of a rating system to state clean indoor air laws (USA). *Tobacco Control*. 2002; 11(1):26–34. doi: 10.1136/tc.11.1.26. [PubMed: 11891365]
- Code Publishing Inc.. Search Municipal Codes. n.d. Retrieved from <http://www.codepublishing.com/elibrary.html#california>

- DiFranza JR, Savageau JA, Fletcher KE. Enforcement of underage sales laws as a predictor of daily smoking among adolescents: A national study. *BMC Public Health*. 2009; 9(107) doi: 10.1186/1471-2458-9-107.
- Emshoff JG. Researchers, practitioners, and funders: Using the framework to get us on the same page. *American Journal of Community Psychology*. 2008; 41:393–403. [PubMed: 18330692]
- Friend KB, Lipperman-Kreda S, Grube JW. The impact of local US tobacco policies on youth tobacco use: A critical review. *Open Journal of Preventive Medicine*. 2011; 1:34–43. [PubMed: 22200035]
- Green L. From research to “Best Practices” in other settings and populations. *American Journal of Health Behavior*. 2001; 25:165–178. [PubMed: 11322614]
- Green L. Making research relevant: If it is an evidence-based practice, where’s the practice-based evidence? *Family Practice*. 2008; 25:i20–i24. doi:10.1093/fampra/cmn055. [PubMed: 18794201]
- Green L, Glasgow R. Evaluating the relevance, generalization, and applicability of research: Issues in external validity and translation methodology. *Evaluation & the Health Professions*. 2006; 29:126–153. doi:10.1177/0163278705284445. [PubMed: 16510882]
- Henriksen L. Comprehensive tobacco marketing restrictions: Promotion, packaging, price and place. *Tobacco Control*. 2012; 21:147–153. doi:10.1136/tobaccocontrol-2011-050416. [PubMed: 22345238]
- Joossens L, Raw M. The Tobacco Control Scale: A new scale to measure country activity. *Tobacco Control*. 2006; 15(3):247–253. doi: 10.1136/tc.2005.015347. [PubMed: 16728757]
- Levy DT, Friend K. A computer simulation model of mass media interventions directed at tobacco use. *Preventive Medicine*. 2001a; 32(3):284–294. doi: 10.1006/pmed.2000.0808. [PubMed: 11277686]
- Levy DT, Friend K. A framework for evaluating and improving clean indoor air laws. *Journal of Public Health Management and Practice*. 2001b; 7(5):87–96. [PubMed: 11680035]
- Levy DT, Cummings KM, Hyland A. A simulation of the effects of youth initiation policies on overall cigarette use. *American Journal of Public Health*. 2000; 90(8):1311–1314. doi: 10.2105/AJPH.90.8.1311. [PubMed: 10937017]
- Levy DT, Friend K, Holder H, Carmona M. Effect of policies directed at youth access to smoking: Results from the SimSmoke computer simulation model. *Tobacco Control*. 2001; 10(2):108–116. doi: 10.1136/tc.10.2.108. [PubMed: 11387530]
- Levy DT, Friend K, Polishchuk E. Effect of clean indoor air laws on smokers: The clean air module of the SimSmoke computer simulation model. *Tobacco Control*. 2001; 10(4):345–351. doi: 10.1136/tc.10.4.345. [PubMed: 11740026]
- Levy DT, Friend KB. Strategies for reducing youth access to tobacco: a framework for understanding empirical findings on youth access policies. *Drugs: Education, Prevention, and Policy*. 2002; 9(3): 285–303.
- Lipperman-Kreda S, Grube JW, Friend KB. Local tobacco policy and tobacco outlet density: Association with youth smoking. *Journal of Adolescent Health*. 2012; 50(6):547–552. doi: 10.1016/j.jadohealth.2011.08.015. [PubMed: 22626479]
- Municode. Municode Library: California. n.d. Retrieved from <http://www.municode.com/Library/CA>
- Paynter J, Edwards R. The impact of tobacco promotion at the point of sale: A systematic review. *Nicotine and Tobacco Research*. 2009; 11(1):25–35. doi: 10.1093/ntr/ntn002. [PubMed: 19246438]
- Technical Assistance Legal Center. Tobacco laws affecting California. Technical Assistance Legal Center; Oakland, CA: 2009. Retrieved from http://www.phlpnet.org/sites/phlpnet.org/files/Tobacco%20Laws%20Affecting%20California%20%28Booklet%29_3_09.pdf
- Technical Assistance Legal Center. Tobacco laws affecting California (Supplement). Technical Assistance Legal Center; Oakland, CA: 2011. Retrieved from http://www.phlpnet.org/sites/phlpnet.org/files/Tobacco_Laws_Affecting_California_Supplement_2011_PDF_Updated_411.pdf
- Tutt D, Bauer L, DiFranza J. Restricting the retail supply of tobacco to minors. *Journal of Public Health Policy*. 2009; 30(1):68–82. doi: 10.1057/jphp.2008.44. [PubMed: 19367302]
- Wakefield MA, Chaloupka FJ, Kaufman NJ, Orleans CT, Barker DC, Ruel EE. Effect of restrictions on smoking at home, at school, and in public places on teenage smoking: Cross sectional study. *British Medical Journal*. 2000; 321(7257):333–337. doi: 10.1136/bmj.321.7257.333. [PubMed: 10926588]

Table 1
Mean (and 95% Confidence Intervals) Experts' Ratings of the Effectiveness of Local Tobacco Policies for Discouraging Youth Smoking

Local Tobacco Policy	Researchers (N = 18)	Rank Order ^a	Prevention Specialists (N = 22)	Rank Order ^a
Indoor clean air laws				
1. 100% smoke-free indoor workplaces	8.28 (7.49, 9.07)	1	9.14 (8.53, 9.75)	1
2. Require all hotel/motel guest rooms to be smoke-free	6.44 (5.34, 7.54)	2	8.50 (7.69, 9.31)	2
3. 100% smoke-free tobacco shops	5.11 (3.98, 6.24)	3	7.82 (6.76, 8.88)	3
4. Require more than 35% (required by state law) but less than 100% of hotel/motel guest rooms to be smoke-free	4.78 (3.71, 5.85)	4	6.36 (5.44, 7.28)	4
Overall indoor clean air policy	6.15 (5.25, 7.05)		7.95 (7.38, 8.52)	
Outdoor clean air laws				
1. 100% of outdoor public events be smoke-free	8.61 (7.78, 9.44)	1	9.27 (8.74, 9.80)	1
2. 100% smoke-free parks, playgrounds and skate parks	8.12 (7.14, 9.10)	2	9.27 (8.66, 9.88)	2
3. 100% smoke-free other recreation areas (not parks)	7.82 (6.84, 8.80)	3	9.27 (8.72, 9.82)	3
4. 100% smoke-free dining areas	7.78 (6.83, 8.73)	4	9.27 (8.86, 9.68)	4
5. All entryways be smoke-free (also non-governmental)	7.00 (5.85, 8.15)	5	8.29 (7.32, 9.26)	6
6. 100% of service areas be smoke-free	6.94 (5.70, 8.18)	6	8.73 (7.93, 9.53)	5
7. Some but not all outdoor public events be smoke-free	5.06 (4.04, 6.08)	7	5.05 (4.02, 6.08)	8
8. Require some parks in the community be smoke-free	4.53 (3.54, 5.52)	8	4.68 (3.39, 5.97)	12
9. Require some entryways (e.g., workplace) be smoke-free	4.50 (3.45, 5.55)	9	4.19 (3.20, 5.18)	14
10. Require some but not all recreation areas be smoke-free	4.12 (3.18, 5.06)	10	4.91 (3.83, 5.99)	10
11. Designated smoking area in outdoor dining areas	3.71 (2.80, 4.62)	11	5.45 (4.18, 6.72)	7
12. Designated smoking area in parks	3.59 (2.53, 4.65)	12	4.59 (3.38, 5.80)	13
13. Designated smoking areas in other recreation areas	3.56 (2.49, 4.63)	13	4.91 (3.83, 5.99)	9
14. Designated smoking areas at outdoor service areas	3.47 (2.36, 4.58)	14	4.20 (3.11, 5.29)	15
15. Designated smoking areas at outdoor public events	3.35 (2.34, 4.36)	15	4.82 (3.71, 5.93)	11
Overall outdoor clean air policy	5.57 (4.78, 6.36)		6.46 (5.84, 7.08)	
Smoke-free multiunit housing				
1. 100% of units be smoke-free	7.94 (7.04, 8.84)	1	8.95 (8.26, 9.64)	1

Local Tobacco Policy	Researchers (N = 18)	Rank Order^a	Prevention Specialists (N = 22)	Rank Order^a
2. All indoor common areas be smoke-free	7.76 (6.81, 8.71)	2	8.41 (7.56, 9.26)	3
3. All outdoor common areas be smoke-free	7.53 (6.52, 8.54)	3	8.91 (8.15, 9.67)	2
4. Some percentage, but not all units be smoke-free	5.17 (4.19, 6.15)	4	5.82 (4.86, 6.78)	4
5. Designated smoking areas in outdoor common areas	3.53 (2.56, 4.50)	5	5.59 (4.46, 6.72)	5
Overall smoke-free multiunit housing policy	6.41 (2.56, 4.50)		7.53 (6.96, 8.10)	
Sale of tobacco products				
1. Prohibit tobacco retail stores near schools	8.44 (7.73, 9.15)	1	9.27 (8.84, 9.70)	2
2. Strong tobacco retailer licensing	8.39 (7.65, 9.13)	2	9.50 (9.19, 9.81)	1
3. Limit the number or location of tobacco outlets	8.28 (7.67, 8.89)	3	9.05 (8.53, 9.57)	3
4. Require retailers to check ID of tobacco purchasers who appear to be under 27 years of age	7.83 (6.86, 8.80)	4	8.64 (8.00, 9.28)	4
5. Prohibit all pharmacies from selling tobacco	6.94 (5.91, 7.97)	5	8.14 (7.22, 9.06)	5
Overall sale of tobacco products policy	7.97 (7.32, 8.62)		8.91 (8.49, 9.33)	
Advertising and promotion				
1. Prohibit all outdoor tobacco advertising	8.61 (8.04, 9.18)	1	9.32 (8.90, 9.74)	1
2. Prohibit all distribution of free or low-cost tobacco products	8.22 (7.36, 9.08)	2	9.18 (8.59, 9.77)	2
3. Reduce the amount of allowable retail storefront signage	6.61 (5.67, 7.55)	3	8.18 (7.44, 8.92)	3
Overall advertising and promotion policy	7.81 (7.19, 8.43)		8.89 (8.48, 9.30)	

^aWithin each policy sub-domain.

Table 2
Mean (and 95% Confidence Intervals) Tobacco Control Scores for the 50 California Communities by Researchers and Prevention Specialists

Policy Sub-domain	Researchers	Prevention Specialists
Indoor clean air laws	4.76 (3.13, 6.39)	5.79 (3.81, 7.78)
Outdoor clean air laws	11.11 (7.66, 14.57)	13.16 (9.06, 17.25)
Smoke-free multiunit housing	3.18 (1.83, 4.54)	3.60 (2.03, 5.18)
Sale of tobacco products	3.91 (2.21, 5.61)	4.38 (2.47, 6.29)
Advertising and promotion	1.33 (.56, 2.10)	1.56 (.64, 2.47)