US Attitudes About Banning Menthol in Cigarettes: Results From a Nationally **Representative Survey**

Jonathan P. Winickoff, MD, MPH, Robert C. McMillen, PhD, Donna M. Vallone, PhD, MPH, Jennifer L. Pearson, MPH, Susanne E. Tanski, MD, Janelle H. Dempsey, BA, Cheryl Healton, DrPH, Jonathan D. Klein, MD, MPH, and David Abrams, PhD

Menthol is a cigarette flavoring that makes smoking more appealing to smokers. The US Food and Drug Administration (FDA) has regulatory authority to ban mentholated cigarettes to reduce youth uptake and encourage adult cessation. Survey findings indicate that more than half of all Americans (56.1%) and of Blacks alone (68.0% in one sample and 75.8% in another) support banning menthol. Endorsement of a ban—especially by Blacks, who have the highest rates of menthol cigarette use-would support FDA action to ban menthol to protect the public's health. (Am J Public Health. Published online ahead of print May 12, 2011; e1-e3, doi:10. 2105/AJPH.2011.300146)

Smoking causes preventable disease and death. Menthol cigarette flavoring plays a role in promoting smoking by enhancing the taste of smoke, decreasing the unpleasantness of early smoking experiences, and impeding adults' efforts to quit.²⁻¹² Youths smoke mentholated cigarettes (menthols) at higher rates than do older smokers (47.7% of those aged 12-17 years vs 31.5% of those older than 25 years). In addition, menthols have been heavily marketed with great success to certain demographic groups; 82.6% of Black smokers and 23.8% of White smokers smoke menthols. 10 Adult menthol smokers are either equally motivated to quit or more motivated to quit compared with

comparable nonmenthol smokers, but menthol smokers report greater difficulty in sustaining cessation.^{9,11-14}

The US Food and Drug Administration's Center for Tobacco Products now regulates tobacco. Cigarettes with flavors such as chocolate have already been banned, with the rationale that such a ban would discourage youth initiation, but menthol was exempted from the ban; the Center for Tobacco Products is considering a separate ban on menthol. Menthols account for approximately 32% of the cigarette market, 10 but little is known regarding public support for banning menthol as a characterizing flavor of cigarettes. We conducted a survey to discern adults' attitudes regarding a ban on menthols in the United States.

METHODS

In November 2009, we used a random-digit dial sampling method to interview a nationally representative cross-sectional sample of US adults by telephone. Among 2560 eligible respondents who were contacted, 1514 (59%) completed interviews. We weighted the sample by race (White, Black, other), age in years $(18-24, 25-34, 35-44, 45-54, 55-64, \ge 65),$ and gender (men, women) within each census region, on the basis of 2008 US Census estimates (weights were capped at 5). Following the same protocol, we interviewed an additional sample of Blacks to obtain more precise estimates of attitudes in this group. Of the 427 eligible Black respondents who were contacted, 303 (75.7%) completed interviews. The higher response rate for the Black-only sample may have been attributable to the presence of the extra screening question to determine Black race. Respondents who did not self-report as Black were ineligible for the additional sample survey.

The surveyors asked questions as part of the Social Climate Survey of Tobacco Control pertaining to beliefs regarding tobacco control.¹⁷ Respondents were asked to strongly agree, agree, disagree, or strongly disagree with this statement: "Menthol cigarettes should be prohibited just like other flavored cigarettes." Responses were dichotomized into "agree" versus "disagree" for analysis.

This item was preceded by the question: "Cigarettes with added flavorings like cherry, chocolate, lime, and mint should be

prohibited." Although more respondents agreed with this statement, support for prohibiting flavorings across demographic categories was similar to support for prohibiting menthol cigarettes. Overall, support among adults for banning flavorings in cigarettes was 70.2%. The majority of Blacks in this original sample also supported prohibiting flavorings (75.7%). Among respondents aged 18 to 24 years, a ban on flavorings was supported by 56.8% overall, 75.7% of those with less than a high school diploma, and 43.1% of smokers. Although the Social Climate Survey of Tobacco Control began in 2000, these items were only added in the 2009 wave of the survey.

We used χ^2 and exact tests for categorical variables to compare characteristics of those reporting support for a ban on menthol. We obtained multivariate results by using logistic regression, with significant results reported at the P < .05 level. We used SPSS version 18.0 to conduct all statistical analyses. 18

RESULTS

Table 1 provides the original sample's weighted demographic characteristics and levels of support for banning menthols. Among respondents, 86.7% were White, and 10.0%were Black. Overall support among adults for banning menthol in cigarettes was 56.1%. The majority of Blacks in the original sample also supported prohibiting menthol (68.0%). Among respondents aged 18 to 24 years, 50.3% supported a ban on menthol; among respondents with less than a high school diploma, 71.2% supported a ban. Among all smokers, 28.4% supported a ban, and 15.8% of non-Black menthol smokers supported a ban (n=76). Table 1 also presents multivariate logistic estimates.

Table 2 provides results for the additional sample that comprised only Blacks. Within this sample, a ban on menthol was supported by 75.8% overall, 83.4% of never smokers, and 52.8% of current smokers. Among Blacks who were current menthol smokers (n=44), 47.7% supported banning menthol.

DISCUSSION

We found that more than half of Americans (56.1%) supported a ban on menthol in cigarettes,

TABLE 1-General Support for Banning Cigarettes With Menthol: United States, 2009

Demographic Variables	Percentage of Sample (Unweighted)	Support Ban on Menthol (Weighted), % (95% CI)	Support Ban on Menthol AOR (95% CI)
Overall (n = 1514)		56.1 (53.5, 58.7)	
Smoking status**			
Never smoker	54.8	67.3 (63.9, 70.7)	5.19 (3.63, 7.41)
Former smoker	30.9	51.0 (45.9, 56.1)	2.66 (1.81, 3.92)
Current smoker ^a (Ref)	14.2	28.4 (22.6, 34.2)	1.00
Race**			
White (Ref)	86.7	53.4 (50.4, 56.4)	1.00
Black	10.0	68.0 (60.6, 75.4)	1.85 (1.23, 2.79)
Other	3.3	72.4 (60.9, 83.9)	2.41 (1.27, 4.55)
Age, y**			
18-24 (Ref)	3.5	50.3 (42.1, 58.5)	1.00
25-44	22.4	53.0 (48.6, 57.4)	1.18 (0.77, 1.79)
45-64	42.0	54.0 (49.4, 58.6)	1.32 (0.86, 2.02)
≥65	32.1	70.2 (64.1, 76.3)	2.26 (1.38, 3.71)
Education*			
<high school<="" td=""><td>7.0</td><td>71.2 (60.8, 81.6)</td><td>3.19 (1.69, 6.04)</td></high>	7.0	71.2 (60.8, 81.6)	3.19 (1.69, 6.04)
High school diploma/GED	26.9	57.6 (52.4, 62.8)	1.46 (1.05, 2.03)
Some college	30.1	55.5 (50.7, 60.3)	1.31 (0.97, 1.77)
College (Ref)	36.0	53.5 (49.1, 57.9)	1.00
Gender**			
Women	65.3	64.7 (60.9, 68.5)	1.87 (1.47, 2.39)
Men (Ref)	34.7	45.6 (42.0, 49.2)	1.00

Note. AOR = adjusted odds ratio; Cl = confidence interval; GED = Graduate Educational Development Exam. a To assess multivariate differences in support for a ban on menthol in cigarettes among menthol smokers and those who did not smoke menthols, we entered a 4-level variable into the logistic model: nonmenthol smoker, menthol smoker, former smoker, and never smoker. Compared with menthol smokers, never smokers (odds ratio [OR] = 9.56; 95% Cl = 5.49, 16.65), former smokers (OR = 4.96; 95% Cl = 2.78, 8.84), and nonmenthol smokers (OR = 2.73; 95% Cl = 1.43, 5.21) were more likely to support a ban on menthol in cigarettes. Because of sample size, it was not possible to replicate this model with the additional sample summarized in Table 2.

with even higher support (68.0%–75.8%) among Blacks, the group with the highest rates of menthol smoking (82.6%). Further, a surprisingly large majority of Black smokers (52.8%)—and even 47.7% of Black menthol smokers—supported a ban, although only 28.4% of all smokers supported a ban. These results strongly indicate broad public support for banning menthol, particularly among Blacks, who are most likely to use menthols. This support could be increased with sufficient public education efforts regarding the role of menthol in promoting initiation and delaying cessation.

The tobacco industry has claimed that menthol does not cause additional health harms to smokers and that retaining menthols serves user demographic groups and taste preferences.¹⁹ However, the Center for Tobacco Products is required to base its decisions on a broad public health standard of likelihood of benefits versus harms to the population at large—both users and nonusers—rather than on a narrow individual standard of harm to current smokers, as the tobacco industry is suggesting.²⁰ Menthol is not just a flavorant; menthol also makes it easier for youths to initiate smoking²⁻⁸ and inhibits adult cessation. $^{9,11-14}$ If banning menthol prevented even a small percentage of youth initiation and encouraged some adult menthol users to quit, then a ban would have a significant impact on public health. A ban on menthol could be used as a teachable moment, potentially reducing smoking prevalence by several million smokers,

provided the ban is preceded by public health education and is coupled with free access to evidence-based cessation interventions.²¹ Given the overwhelming suffering caused by smoking, menthol has no redeeming value other than to make the poison go down more easily.²²

About the Authors

Jonathan P. Winickoff and Janelle H. Dempsey are with the Center for Child and Adolescent Health Policy, Mass-General Hospital for Children, Boston, MA. Robert C. McMillen, Susanne E. Tanski, and Jonathan D. Klein are with the American Academy of Pediatrics Julius B. Richmond Center of Excellence, Elk Grove Village, IL. Jennifer L. Pearson and David Abrams are with the Schroeder Institute for Tobacco Research and Policy Studies, American Legacy Foundation, Washington, DC. Domna M. Vallone is with the Department of Research and Evaluation, American Legacy Foundation, Washington, DC. Cheryl Healton is with the American Legacy Foundation, Washington, DC.

Correspondence should be sent to Jonathan P. Winickoff, MD, MPH, MGH Center for Child and Adolescent Health Policy, 50 Staniford St, Suite #901, Boston, MA 02114 (e-mail: jwinickoff@partners.org). Reprints can be ordered at http://www.ajph.org by clicking the "Reprints/Eprints" button.

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Contributors

J.P. Winickoff led all phases of the analyses, drafted the article, and revised the article. All authors participated in planning or conducting the analyses and in editing drafts of the article.

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Human Participant Protection

The Mississippi State University institutional review board approved this study protocol.

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^{*}P<.05; **P<.001.

RESEARCH AND PRACTICE

TABLE 2—Support Among Blacks for Banning Cigarettes With Menthol: United States, 2009

Demographic Variables	Percentage of Sample (Unweighted)	Support Ban on Menthol (Weighted), % (95% CI)	Support Ban on Menthol AOR (95% CI)
Overall (n = 303)		75.8 (70.9, 80.7)	
Smoking status**			
Never smoker	64.4	83.4 (78.0, 88.8)	3.83 (1.74, 8.45)
Former smoker	17.8	71.4 (57.7, 85.1)	1.95 (0.74, 5.15)
Current smoker (Ref)	17.8	52.8 (39.4, 66.2)	1.00
Age, y			
18-24 (Ref)	12.5	87.5 (78.1, 96.9)	1.00
25-44	31.0	77.6 (70.0, 85.2)	0.58 (0.21, 1.60)
45-64	38.9	67.1 (56.9, 77.3)	0.39 (0.14, 1.11)
≥65	17.5	75.9 (60.3, 91.5)	0.54 (0.15; 1.97)
Education			
< High school ^a	12.2	62.5 (43.1, 81.9)	0.61 (0.19, 1.97)
High school diploma/GED	30.0	83.3 (75.3, 91.3)	1.65 (0.71, 3.81)
Some college	30.7	69.4 (59.6, 79.2)	0.66 (0.31, 1.42)
College (Ref)	27.1	78.3 (69.4, 87.2)	1.00
Gender			
Women	69.3	80.9 (74.7, 87.1)	1.74 (0.95, 3.20)
Men (Ref)	30.4	69.1 (60.9, 77.3)	1.00

Note. AOR = adjusted odds ratio; CI = confidence interval; GED = Graduate Educational Development Exam. a n < 30.

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^{**}*P*<.001.