



August 2008

Carrie Hinterthuer
Project Assistant
Tobacco Surveillance and
Evaluation Program

Daphne Kuo, PhD
Researcher
Tobacco Surveillance and
Evaluation Program

Karen Palmersheim, PhD, MS
Program Director
Tobacco Surveillance and
Evaluation Program

Tobacco Surveillance and
Evaluation Program
370 WARF
610 N. Walnut Street
Madison, Wisconsin 53726

Phone
(608) 262-2825

Fax
(608) 262-2425

Website
www.medsch.wisc.edu/mep

Support for this report was provided by the Wisconsin Tobacco Prevention and Control Program, Bureau of Community Health Promotion, Division of Public Health, Wisconsin Department of Health Services.

Menthol Cigarette Use Among African Americans in Wisconsin

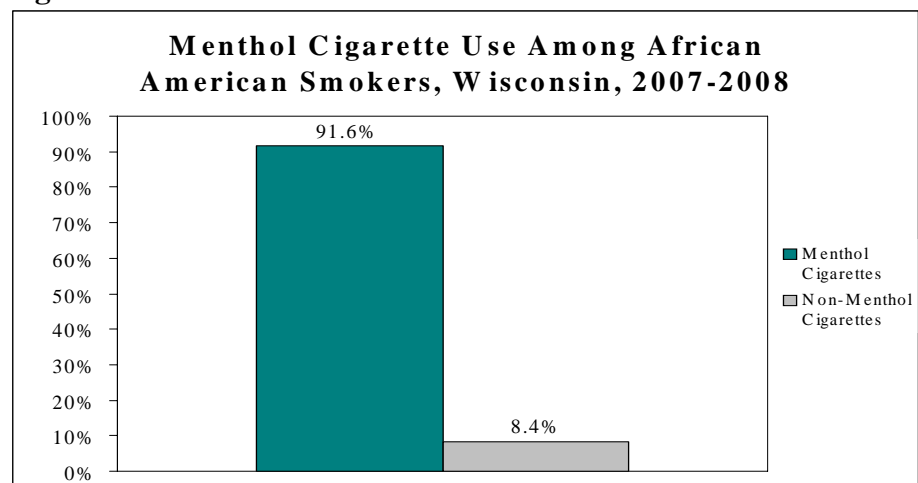
In 2007-2008, the UW Tobacco Surveillance and Evaluation Program developed the Minority Health and Tobacco Survey–African Americans. A sample of African Americans in Wisconsin was surveyed to examine this population’s tobacco use, including menthol cigarette use.

This program brief reviews the prevalence of menthol cigarette use among African American smokers with regards to age, gender, educational attainment, marital status, employment status, and smoking status.

Major findings:

- **In 2007-2008, 92% of African American smokers reported using menthol cigarettes (see Figure 1). By comparison, mentholated cigarettes make up approximately 27% of the cigarette market.**
- **Regardless of age, gender, educational attainment, marital status, employment status and smoking status, all socio-demographic subgroups were more likely to use menthol cigarettes than non-menthol cigarettes.**

Figure 1



BACKGROUND

Prior research has shown that African American smokers tend to prefer menthol cigarettes compared to non-menthol cigarettes.^{1,2} Although a 2005 report by the Federal Trade Commission stated that mentholated cigarettes made up only 27% of the cigarette market,³ the Centers for Disease Control and Prevention reported that approximately 75% of African American smokers chose to use mentholated cigarettes (based on data presented in the 1998 Surgeon General's Report.)⁴ According to data collected in 2000 on over 18,000 smokers, approximately 69% of Blacks reported using mentholated cigarettes.⁵ A more recent study, using 2002 data on 2,500 smokers, found that 78% of black smokers used menthol cigarettes.⁵

By comparison, studies of smokers have shown that approximately 20-30% of Whites use menthol cigarettes,^{1,4,5,6,7} and roughly 28% of Hispanics smoke mentholated cigarettes.⁵ Prior research suggests that marketing has had a disparate impact on menthol cigarette use among Blacks and Whites. Since the 1960s, cigarette manufacturers have intensely marketed menthol cigarettes to black smokers; this marketing is believed to explain, at least in part, why such a high percentage of black smokers continue to use menthol cigarettes today.²

Research indicates that mentholated cigarettes are associated with worse smoking-related health outcomes compared to smoking non-mentholated cigarettes. For example, earlier studies suggest that African Americans who smoke mentholated cigarettes have a more difficult time quitting as compared to those who smoke non-mentholated cigarettes.^{6,7,8} Also, a 1996 report found that menthol cigarettes were significantly associated with higher cotinine (a metabolite of nicotine) levels, and were perhaps linked to a higher absorption of cigarette smoke carcinogens than non-menthol cigarettes.⁹ Additional reports suggest an association between smoking menthol cigarettes and having an increased risk of developing esophageal cancer.^{10,11} The 1998 Surgeon General's Report stressed the need to investigate the relationship of menthol cigarettes with African American smokers' high levels of serum cotinine, as well as the higher rate of esophageal cancer rates.¹²

The purpose of the current study was to update our knowledge of African American menthol cigarette use, specifically in the state of Wisconsin. In addition, we examined whether menthol cigarette use varies by select socio-demographic factors.

METHODS

This Program Brief used data collected from the Minority Health and Tobacco Survey–African Americans. Data collection occurred from October 2007 through April 2008. The survey was conducted in Wisconsin via a telephone interview of non-institutionalized African American adults, aged 18 years or older. The study included 640 people; 24.2% reported they currently smoked cigarettes. The question used in these analyses was “*Do you smoke menthol cigarettes?*” This question was asked of respondents that reported they were current cigarette smokers at the time of interview.

RESULTS

The data found that 91.6% of African American smokers used mentholated cigarettes (see Figure 1). Additional analysis, as presented in Table 1, showed that regardless of age, gender, educational attainment, marital status, employment status, or smoking status, the use of menthol cigarettes was high across all socio-demographic subgroups.

Table 1

Menthol Cigarette Use Among African American Smokers, by Socio-demographic Subgroup, Wisconsin, 2007-2008			
Overall Menthol Cigarette use: 91.6%			
Age		Education	
18-24	95.2%	Less than HS	87.0%
25-44	87.7%	HS Grad/GED	90.0%
45-54	96.2%	Some College	97.4%
55+	83.3%	College Grad +	92.3%
Gender		Smoking Status	
Males	87.9%	Smoke Every Day	94.9%
Females	93.3%	Smoke Some Days	85.7%
Employment Status		Marital Status	
Employed	91.7%	Married	84.0%
Unemployed	96.3%	Divorced	95.5%
Other	87.1%	Never Married	86.7%

* Homemaker, student, retired, or disabled

DISCUSSION

Analysis of data from Wisconsin’s Minority Health and Tobacco Survey–African Americans revealed that, among current smokers, smoking menthol cigarettes is common across all age, gender, employment, educational, smoking, and marital groups. The minimal variation found within each of these subgroups may be a result of small sub-sample sizes.

Based on prior research, we expected to find a high percentage of Wisconsin African Americans smoking mentholated cigarettes. However, the prevalence of African American menthol cigarette use in this study, 92%, was higher than that previously reported (69%-78%).^{4,5} In addition, our findings were substantially higher than the market share of 27% for menthol cigarettes.³ Given these findings are based on the first Wisconsin African American menthol cigarette study, it is not known how the current prevalence compares to previous levels.

Previous research has suggested the preference for mentholated cigarettes among African American smokers is associated with manufacturer marketing, as well as the shared social norm

of menthol cigarette use.^{2,13} Further investigation, using data from the Minority Health and Tobacco Survey–African Americans, will reveal whether these factors hold true in Wisconsin. Moreover, other reasons for the preference of mentholated cigarettes among African Americans may be illuminated.

In 2007, menthol cigarettes became a controversial topic as a bill was introduced to Congress that required the Food and Drug Administration to regulate tobacco. While this bill bans the addition of flavoring agents in cigarettes, it does not ban the incorporation of menthol. It does, however, allow menthol to be subject to FDA regulation. In 2008, public health professionals, the Congressional Black Caucus, and other groups raised concerns that the lack of a menthol ban would disparately affect African American smokers due to the high prevalence of menthol cigarette use among this population.

ACKNOWLEDGEMENTS

The authors wish to thank Dr. Patrick Remington, David Ahrens, and Randall Glysch for their helpful reviews of this report.

REFERENCES

1. Mustonen TK, Spencer SM, Hoskinson RA, Sachs DPL, Garvey AJ. The influence of gender, race, and menthol content on tobacco exposure measures. *Nicotine & Tobacco Research*. 2005;7(4):581-590.
2. Gardiner PS. The African Americanization of menthol cigarette use in the United States. *Nicotine & Tobacco Research*. 2004;6(S1):S55-S65.
3. Federal Trade Commission. *Federal Trade Commission Cigarette Report for 2004 and 2005*. Washington, DC: Federal Trade Commission; 2007.
4. Centers for Disease Control and Prevention, Department of Health and Human Services, Smoking and Tobacco Use. 1998 Surgeon General's Report—Tobacco Use Among U.S. Racial/Ethnic Minority Groups. http://www.cdc.gov/tobacco/data_statistics/sgr/sgr_1998/sgr-min-afr.htm. Accessed on July 22, 2008.
5. Giovino GA, Sidney S, Gfroerer JC, O'Malley PM, Allen JA, Richter PA, Cummings KM. Epidemiology of menthol cigarette use. *Nicotine & Tobacco Research*. 2004;6(S1):S67-S81.
6. Pletcher MJ, Hulley BJ, Houston T, Kiefe CI, Benowitz N, Sidney S. Menthol cigarettes, smoking cessation, atherosclerosis and pulmonary function. *Archives of Internal Medicine*. 2006;166:1915-1922.
7. Okuyemi KS, Ebersole-Robinson M, Nazir N, Ahluwalia JS. African-American menthol and nonmenthol smokers: differences in smoking and cessation experiences. *Journal of the National Medical Association*. 2004;96(9):1208-1211.
8. Clark PI, Gautam S, Gerson LW. Effect of menthol cigarettes on biochemical markers of smoke exposure among black and white smokers. *Chest*. 1996;110:1194-1198.

9. Okuyemi KS, Faseru B, Sanderson Cox L, Bronars CA, Ahluwalia JS. Relationship between menthol cigarette and smoking cessation among African American light smokers. *Addiction*. 2007;102(12):1979-1986.
10. Herbert JR, Kabat GC. Menthol cigarette smoking and oesophageal cancer. *International Journal of Epidemiology*. 1989;18(1):37-44.
11. Azzi C, Zhang J, Purdon CH, Chapman JM, Nitcheva D, Hebert JR, Smith EW. Permeation and reservoir formation of 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone (NNK) and benzo[a]pyrene (B[a]P) across porcine esophageal tissue in the presence of ethanol and menthol. *Carcinogenesis*. 2005;27(1):137-145.
12. U.S. Department of Health and Human Services. *Tobacco Use Among U.S. Racial/Ethnic Minority Groups—African Americans, American Indians and Alaska Natives, Asian Americans and Pacific Islanders, and Hispanics: A Report of the Surgeon General*. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 1998.
13. Allen B, Unger J. Sociocultural correlates of menthol cigarette smoking among adult African Americans in Los Angeles. *Nicotine & Tobacco Research*. 2007;9(4):447-451.