

WRITTEN DOCUMENT TO SUPPORT FDA-TPSAC PRESENTATION ON MONDAY, JAN. 10, 2011

“What Menthol Smokers Report They Would Do If Menthol Cigarettes Were No Longer Sold”

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PURPOSE

The main purpose of the presentation and this supporting written documentation is to provide the FDA-TPSAC new nationally representative data on menthol smokers' intentions, specifically what they report they would do if menthol cigarettes were no longer sold. This is the first time this question has been asked in a large national survey.

An additional purpose is to report the most recent data on the percentage of current cigarette smokers who smoke menthol cigarettes.

DATA SOURCE AND METHODOLOGY

The data come from the National Cancer Institute (NCI)-sponsored May 2010 Tobacco Use Supplement (TUS) to the Current Population Survey (CPS) (Tobacco Use Supplements to the Current Population Survey). The CPS is a continuous monthly survey conducted by the Census Bureau for the Bureau of Labor Statistics (U.S. Census Bureau. *Current Population Survey. Design and Methodology*. Technical Paper 66, <http://www.census.gov/prod/2006pubs/tp-66.pdf>). The CPS is the primary source of labor force data and a major source of demographic statistics on the U.S. population. Each month, the CPS provides a large, address-based, national probability sample of 59,000 households. The sample represents the civilian non-institutionalized population of all 50 States and the District of Columbia.

Since 1992, the NCI has sponsored the TUS every 3 years to obtain information on tobacco use practices, attitudes, and intentions, and related norms and policy. Each survey wave consists of 3 months of data collection, typically spaced 4 months apart. This approach provides a sample of individuals that is sufficiently large to make state and sub-state level estimates.

The 2010-2011 TUS-CPS data were collected in May 2010, August 2010, and January 2011. The data presented on January 10, 2011 and discussed here represent data from the first month of fielding in May 2010. These data have been edited and weighted by the Census Bureau. The weights are based on standard Census procedures that account for both the probability of selection and post-stratification adjustment for non-response.

All persons aged 18 years and older in CPS interviewed households are eligible for the TUS. Trained field interviewers conduct the interviews either with an in-person visit or over the telephone. The data collection mode (in person visit or telephone) is largely determined by the CPS panel design protocol.

For the May 2010 TUS, a total of 84,180 persons were interviewed, representing a response rate of 82% of eligible persons aged 18 years and older. Seventy-six percent (63,826) of the TUS interviews were provided by self-response, the rest were by proxy. Because questions about usual menthol cigarette use and the intentions of menthol cigarette smokers require self-response, the available sample size for analysis was 63,826, with 37 % of the interviews conducted in person and 63% conducted by telephone.

The following information and accompanying tables are for subpopulation data with sufficient sample sizes. At the time of the January 10 FDA-TPSA presentation the standard errors for computing confidence intervals were not available. This documentation includes subsequent calculation of confidence intervals based on standard errors corrected for the complex design using a replicate weighting estimation of variance (U.S. Census Bureau, 2006). SUDAAN Release 10.0.1 software was used to derive these estimates and confidence intervals.

See <http://riskfactor.cancer.gov/studies/tus-cps/> for more details about the TUS-CPS and the CPS general design.

QUESTIONS USED TO DETERMINE CURRENT SMOKING, MENTHOL SMOKING, AND MENTHOL SMOKERS' INTENTIONS

The TUS-CPS considered a respondent a current cigarette smoker if he/she answered "yes" to the question, "*Have you ever smoked 100 cigarettes in your entire life?*" and "*every day*" or "*some days*" to the question, "*Do you now smoke cigarettes every day, some days or not at all?*"

The 2010 TUS asked all of the 10, 441 current cigarette smokers, "*Do you usually smoke menthol or non-menthol cigarettes?*" Allowable responses included "no usual type," "don't know," and "refused."

The TUS asked the 2,887 current menthol smokers, "*IF menthol cigarettes were no longer sold, which of the following would you MOST LIKELY DO?*" The choices were read in the order that they appear here in Table 2: "*Switch to non-menthol cigarettes,*" "*Switch to some other tobacco product,*" or "*Quit smoking and not use any other tobacco product.*" Respondents also could indicate "*none of the above,*" or "*don't know,*" or "*refuse.*"

RESULTS

Tables 1 and 2 highlight the major findings:

In May 2010, 30% of current smokers within the general population usually smoked menthol cigarettes, although this percentage varied widely among demographic groups (Table 1). The proportion of smokers who usually use menthol cigarettes was about 76% among Non-Hispanic Blacks, about 35% among females, and about 42% of those aged 18 to 24 years. The percentage of those smoking menthol cigarettes showed a statistically significant decrease with each age category (18-24, 25-34, 35+) as demonstrated by the non-overlapping confidence intervals.

Table 2 provides an indication of the intentions under the condition “if menthol cigarettes were no longer sold” among those who usually smoke menthol cigarettes. Among all current menthol smokers, a large proportion, 39 % indicated that they would quit smoking and not use any other tobacco product.

Non-Hispanic Black menthol smokers were significantly more likely than their Non-Hispanic White counterparts to indicate that they would quit smoking and not use any other tobacco product (47% vs. 34%, respectively). A large proportion of female menthol smokers (42%) and of menthol smokers aged 18-44 years (41%) also made this selection.

SUMMARY

These new data contain several highly encouraging findings. The TUS patterns in reported levels of menthol cigarette use among current smokers overall and among population subgroups in May 2010 are consistent with other national survey data such as the 2005 National Health Interview Survey Cancer Control Supplement (NHIS-CCS) and the 2004-2008 National Survey on Drug Use and Health (NSDUH). The relative consistency among the surveys in contrasting various subgroups is actually remarkable given the differences in survey design, time-frame, slight differences in age categories, and sample size. Our estimate for menthol cigarette use of 30% among all current smokers and these other survey data are also consistent with market data. The latest Maxwell reports showed that 29% of U.S. cigarette market share were menthol cigarettes (Maxwell Reports 2010, 2009). The NSDUH data with a large enough sample size of young adult smokers as well as older adult smokers show a decreasing age gradient for menthol smoking similar to our May 2010 data.

Most importantly, 39% of menthol smokers say they would quit all tobacco use if menthol cigarettes were no longer sold. Furthermore, groups with the highest proportion of menthol cigarette users-- Non-Hispanic Blacks, females and young adults – also had high percentages of menthol smokers who said they would quit all tobacco products if menthol cigarettes were no longer sold.

CONCLUSIONS

Research indicates that behavioral intentions are generally associated with actual behavior (Ajzen I, 1991; Ajzen I and Fishbein M, 1980; Fishbein M and Ajzen, 1975), including those involving tobacco use (Pai and Edington, 2008; Rise et al. 2008; Wiggers et al. 2005). In light of that, these results suggest a

potential substantial reduction in tobacco use if menthol cigarettes were no longer sold. Even if a small proportion of menthol smokers quit, this reduction would have an important impact on public health.

Note in particular that Non-Hispanic Blacks disproportionately smoke menthol cigarettes and disproportionately suffer from tobacco-related cancers. Thus, their relatively common intention to quit all tobacco use, if menthol cigarettes were no longer sold, may yield a large effect on this population group.

Younger adults' intention to quit if menthol cigarettes were no longer sold also is particularly encouraging, given findings that menthol cigarette use is high in young adults and the earlier in life adults quit smoking, the greater the positive impact on public health.

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Table 1 “Do you usually smoke menthol or non-menthol cigarettes?” TUS-CPS, May 2010

	% Smoke menthol cigarettes (95% CI)	% Smoke non-menthol cigarettes (95% CI)	% Smoke no usual type (95% CI)	% Don't Know/ Refused (95% CI)
Overall (n = 10,441)	30.2 (29.1-31.2)	65.7 (64.6-66.8)	2.8 (2.4-3.2)	1.4 (1.1-1.7)
NH-White (n = 8,058)	23.0 (21.8-24.2)	73.4 (72.1-74.6)	2.4 (1.9-2.8)	1.3 (1.0-1.6)
NH-Black (n = 1,013)	75.8 (72.6-78.8)	20.1 (17.3-23.2)	2.5 (1.7-3.5)	1.6 (0.9-2.8)
Males (n = 5,156)	25.8 (24.2-27.3)	69.2 (67.5-70.8)	3.3 (2.8-3.9)	1.7 (1.4-2.2)
Females (n = 5,285)	35.4 (33.9-36.9)	61.6 (60.1-63.1)	2.1 (1.7-2.6)	0.9 (0.6-1.3)
18-24 yrs (n = 976)	41.8 (38.2-45.5)	52.9 (49.2-56.5)	4.1 (2.9-5.9)	1.1 (0.6-2.2)
25-34 yrs (n = 2,155)	32.7 (30.1-35.4)	63.7 (60.9-66.3)	2.4 (1.7-3.2)	1.3 (0.8-2.0)
35+ yrs (n = 7,310)	26.7 (25.6-27.9)	69.2 (68.0-70.4)	2.6 (2.2-3.0)	1.4 (1.2-1.8)

Table 2 “If menthol cigarettes were no longer sold, which of the following would you most likely do?” TUS-CPS, May 2010

	% Switch to non-menthol cigarettes (95% CI)	% Switch to some other tobacco product (95% CI)	% Quit smoking and not use any other product (95% CI)	% None of the above (95% CI)	% Don't Know/ Refused (95% CI)
Overall (n = 2,887)	36.2 (33.9-38.6)	7.7 (6.7-8.9)	39.0 (36.8-41.1)	9.4 (8.2-10.6)	7.7 (6.6-9.1)
NH-White (n = 1,704)	42.2 (39.3-45.3)	7.9 (6.5-9.6)	34.2 (31.5-37.0)	7.4 (6.1-9.0)	8.3 (6.6-10.3)
NH-Black (n = 763)	25.7 (22.6-29.1)	7.6 (5.6-10.1)	46.7 (42.5-51.1)	12.2 (9.9-14.9)	7.8 (6.0-10.3)
Males (n = 1,170)	38.7 (35.3-42.3)	9.9 (8.1-12.0)	35.6 (32.1-39.3)	8.2 (6.6-10.0)	7.6 (6.0-9.6)
Females (n = 1,717)	34.1 (31.2-37.0)	5.9 (4.7-7.4)	41.8 (39.2-44.5)	10.4 (8.9-12.2)	7.8 (6.4-9.5)
18-44 yrs (n = 1,484)	36.5 (33.4-39.8)	8.1 (6.7-9.7)	40.6 (37.4-43.9)	8.3 (6.8-10.2)	6.5 (5.0-8.3)
45+ yrs (n = 1,403)	35.8 (32.9-38.8)	7.3 (5.9-9.0)	36.7 (33.6-39.9)	10.8 (9.0-12.8)	9.5 (7.7-11.6)