

Wisconsin Tobacco Facts: Menthol Use Among Wisconsin Adults

March 2024



Center for Urban Population Health
University of Wisconsin-Milwaukee



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Community-engaged.*

ACKNOWLEDGEMENTS

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This report is available at: <https://www.cuph.org/tobacco.html>.

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PREFACE

Menthol is a chemical compound found naturally in peppermint and other similar plants; it can also be produced in a lab. It has been used as a flavoring agent in cigarettes since the 1920's,¹ and its popularity has grown steadily over the years. In 2019, sales of menthol-flavored cigarettes made up 37% of all cigarette sales among the major manufacturers in the United States, reaching an all-time high.² According to the most recently available sales data, menthol-flavored cigarettes sales made up 36% of the market in 2022.³

Given the overwhelming negative health outcomes associated with cigarette smoking and the prevalence of menthol cigarette use, menthol has been a key topic of tobacco research for many years. According to an overview and synopsis of menthol use and its effects, published online by the Centers for Disease Control and Prevention (CDC),⁴ there are numerous concerns associated with the utilization of menthol in tobacco products. Just to mention a few, menthol makes cigarettes less harsh and easier to smoke, thus making them more attractive to young people and first-time smokers. Menthol enhances the effects of nicotine on the brain, making tobacco products more addictive. Menthol in cigarettes may make it more difficult to quit smoking, as some studies have found that menthol cigarette smokers are less likely to quit long-term than non-menthol smokers. Some groups (e.g., young people, women, and racial and ethnic minority groups, particularly black people) are more likely to smoke menthol cigarettes compared to other population groups. *(For additional information on menthol use and its effects, the interested reader is referred to the above referenced CDC discussion, along with its list of references.)*

The purpose of this report is to examine the prevalence of menthol cigarette use among Wisconsin adults. It also investigates how several socio-demographic, mental health, and tobacco-related behavioral factors are associated with its use.

Data are from the most recently available years of the Wisconsin Behavioral Risk Factor Survey (BRFS) that included a question on menthol cigarette use. Three years of data (2017, 2019 and 2021) were merged in order to enhance sample sizes, thereby improving the reliability of estimates for subgroups. Preliminary analysis of each individual year revealed similar prevalences of menthol cigarette use for these years. Additionally, preliminary analysis revealed the prevalence of menthol cigarette use among Wisconsin adults was similar for current smokers and former smokers during these three years. Thus, menthol use among current and former smokers were considered conjointly.

The BRFS is a cross-sectional survey. Thus, the findings presented using its data represent a snapshot of the state's adult population each year it is conducted. Accordingly, the data cannot elucidate cause and effect, but rather reveal correlations between the factors examined. Though correlation does not imply causation, correlations reveal important characteristics and patterns that are crucial to understanding tobacco-related behavior.

The findings presented here are intended to provide a resource for state and local health departments, health professionals, educators, and local coalitions working to reduce tobacco consumption and its associated burden in Wisconsin. This report may also assist public health agencies in determining the focus of future programmatic efforts, particularly as it relates to menthol cigarette use.

Analysis were conducted using SPSS, v. 29. Data were weighted to be representative of the state population from which they were drawn.

KEY FINDINGS

Menthol Cigarette Use among Current Smokers

- The prevalence of menthol cigarette use among Wisconsin adults who were current smokers during 2017 was 42%, during 2019 it was 45%, and during 2021 it was 42%. The average prevalence for the three years was 43%.

Menthol Cigarette Use among Former Smokers

- The prevalence of menthol cigarette use among Wisconsin adults who reported being former smokers during 2017 was 43%, during 2019 it was 46%, and during 2021 it was 42%. The average prevalence for the three years was 44%.

Menthol Cigarette Use by Smoking Frequency

- Among current smokers in 2017, 2019, and 2021, 45% of those who smoked cigarettes every day reported using menthol cigarettes, compared to 38% of those who smoked cigarettes on some days.

Menthol Cigarette Use by Age

- Among current and former smokers in 2017, 2019, and 2021, adults aged 18-24 years were most likely to smoke menthol cigarettes (57%), followed by those aged 25-34 years (54%). Those aged 45-54 years and those aged 65 years or more were least likely to smoke menthol cigarettes (37% and 38%, respectively).

Menthol Cigarette Use by Sex

- Among current and former smokers in 2017, 2019, and 2021, females were more likely to smoke menthol cigarettes (50%) than males (38%).

Menthol Cigarette Use by Race/Ethnicity

- Among current and former smokers in 2017, 2019, and 2021, 85% of Blacks smoked menthol cigarettes, followed by Whites (41%), and American Indian/Alaska Natives (40%).

Menthol Cigarette Use by Educational Attainment

- Among current and former smokers in 2017, 2019, and 2021, adults with less than a high school degree were most likely to smoke menthol cigarettes (49%), followed by those with some college (45%), those with a high school degree or GED (41%), and college graduates (40%).

Menthol Cigarette Use by Annual Household Income

- Among current and former smokers in 2017, 2019, and 2021, adults in households making \$15,000-\$24,999 per year were most likely to smoke menthol cigarettes (48%). Those in households making \$75,000 or more were least likely to smoke menthol cigarettes (39%).

Menthol Cigarette Use by Urban/Rural Residence

- Among current and former smokers in 2019 and 2021, adults living in urban areas were more likely to smoke menthol cigarettes (45%) than those living in rural areas (37%).

Menthol Cigarette Use by Sexual Orientation

- Among current and former smokers in 2017, 2019, and 2021, lesbian/gay/bisexual/other adults were slightly more likely to smoke menthol cigarettes (47%) than heterosexual adults (43%).

KEY FINDINGS, continued

Menthol Cigarette Use by Veteran Status

- Among current and former smokers in 2017, 2019, and 2021, non-veterans were more likely to smoke menthol cigarettes (45%) than veterans (34%).

Menthol Cigarette Use by Depression

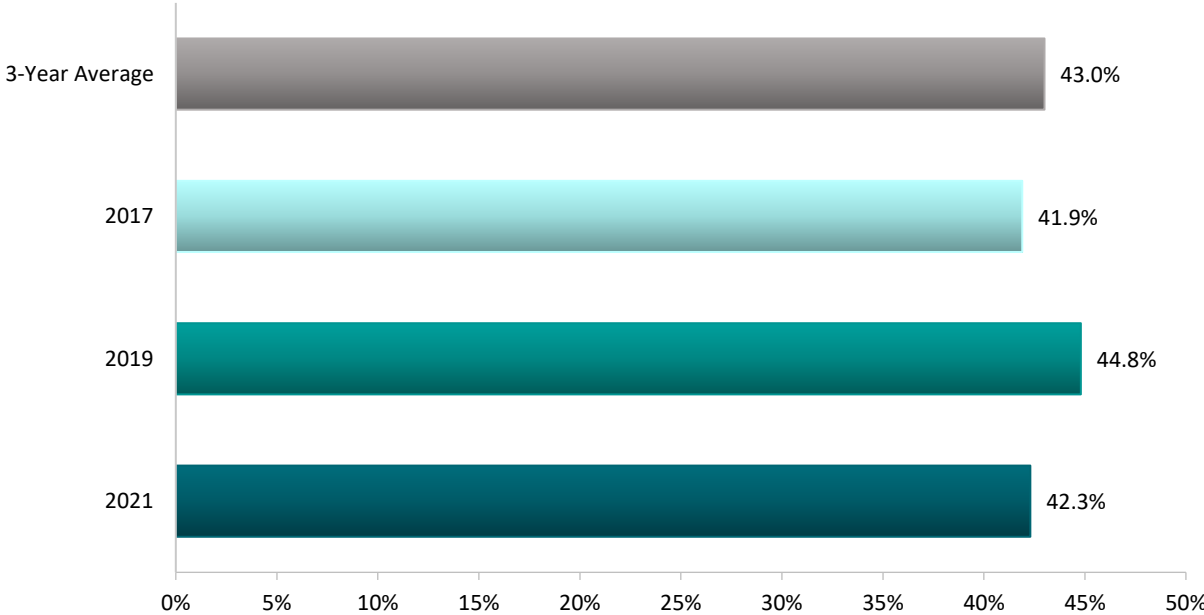
- Among current and former smokers in 2017, 2019, and 2021, adults who had ever been diagnosed with depression were more likely to smoke menthol cigarettes (50%) than those who had never been diagnosed with depression (41%).

Menthol Cigarette Use by Number of Poor Mental Health Days

- Among current and former smokers in 2017, 2019, and 2021, adults who experienced 14 or more poor mental health days (of the previous 30 days) were more likely to smoke menthol cigarettes (51%) than those experiencing 1 to 13 poor mental health days (42%), or no poor mental health days (43%).

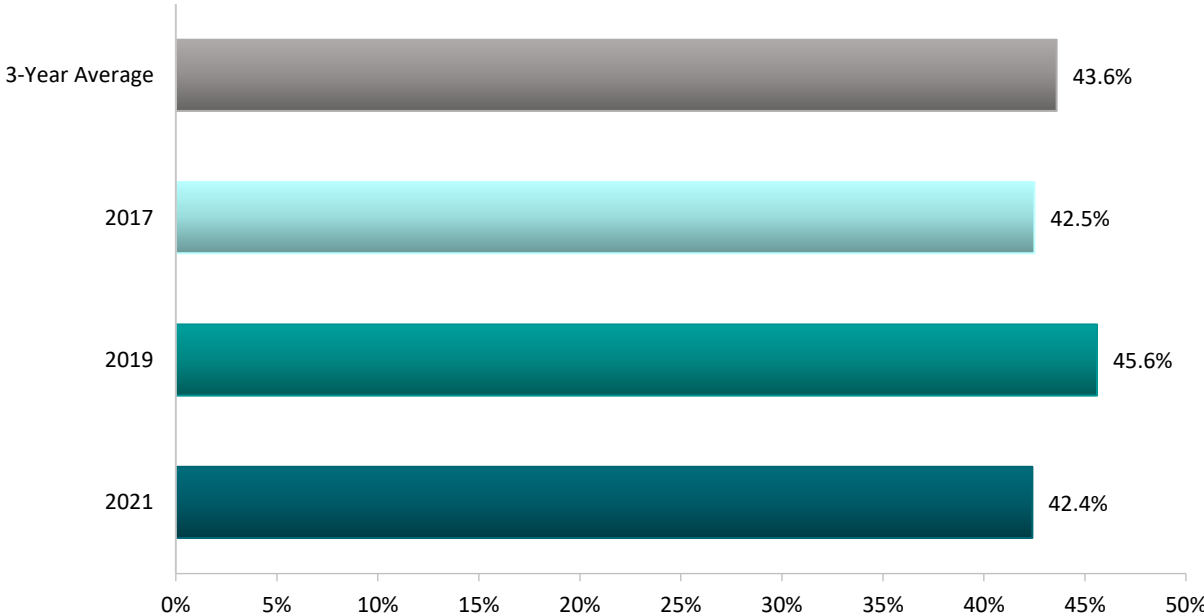
RESULTS

Figure 1. Prevalence of Menthol Cigarette Use among Current Smokers, by Year and 3-Year Average, Wisconsin Adults, 2017, 2019, 2021



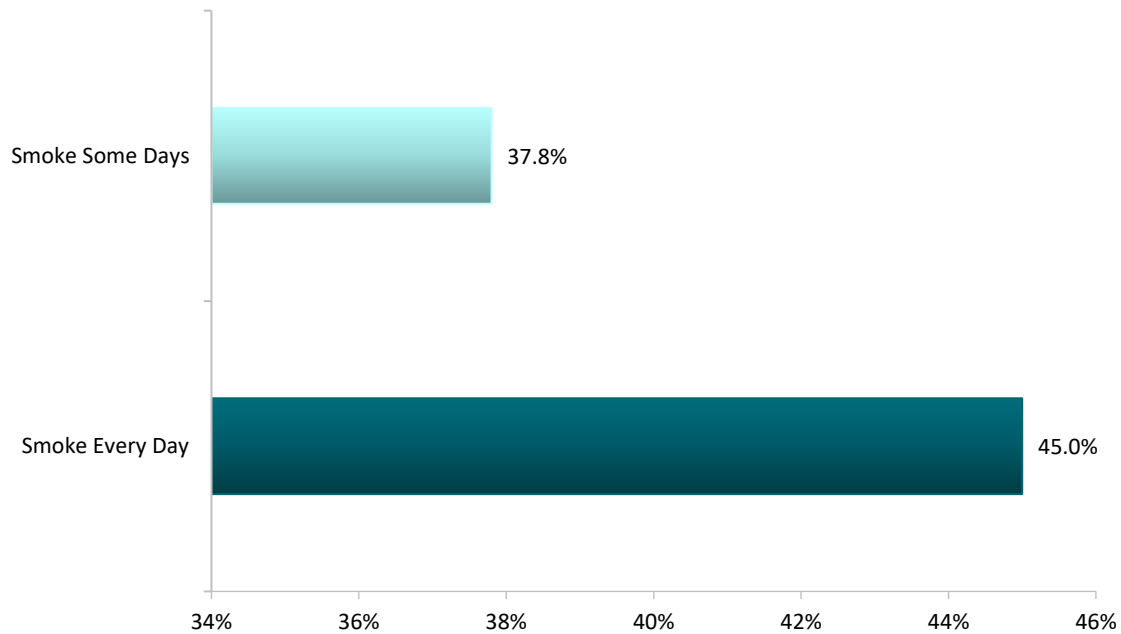
Data: Wisconsin Behavioral Risk Factor Survey, 2017, 2019, 2021

Figure 2. Prevalence of Menthol Cigarette Use among Former Smokers, by Year and 3-Year Average, Wisconsin Adults, 2017, 2019, 2021



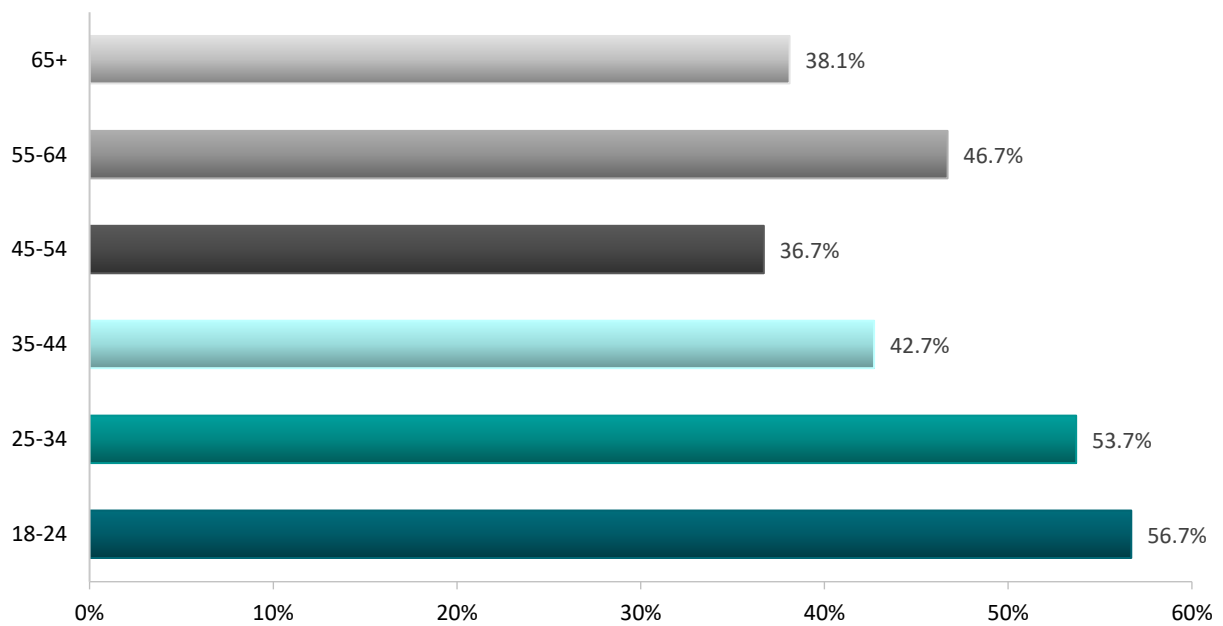
Data: Wisconsin Behavioral Risk Factor Survey, 2017, 2019, 2021

Figure 3. Prevalence of Menthol Cigarette Use Among Current Smokers, by Smoking Frequency, Wisconsin Adults, 2017, 2019, 2021



Data: Wisconsin Behavioral Risk Factor Survey, 2017, 2019, 2021

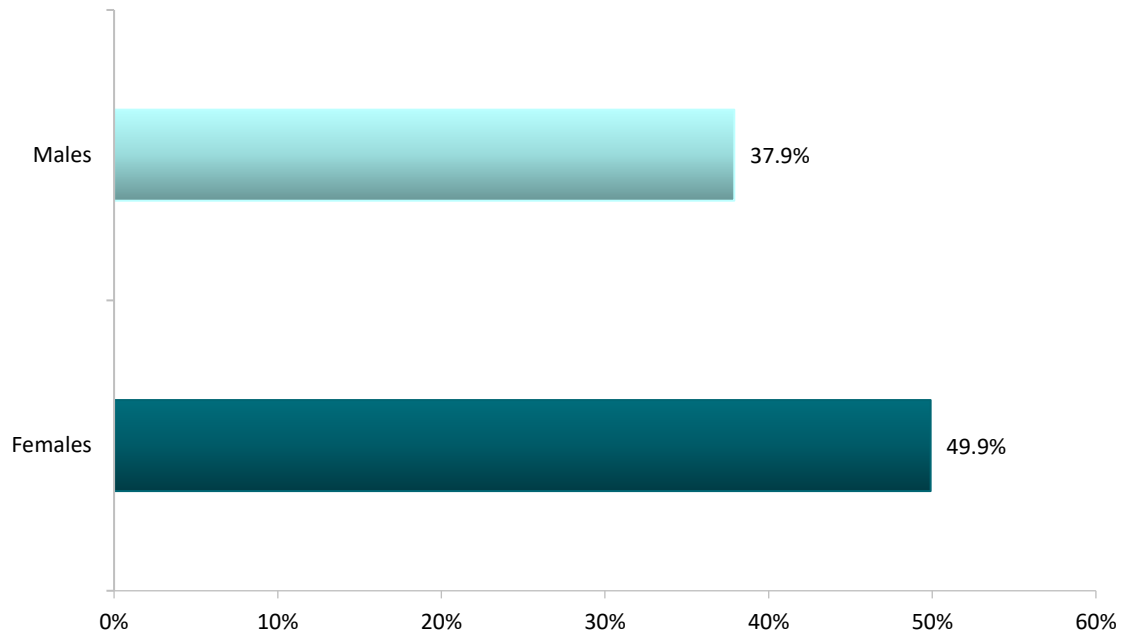
Figure 4. Prevalence of Menthol Cigarette Use*, by Age, Wisconsin Adults, 2017, 2019, 2021



* Menthol use was assessed among current smokers and former smokers conjointly.

Data: Wisconsin Behavioral Risk Factor Survey, 2017, 2019, 2021

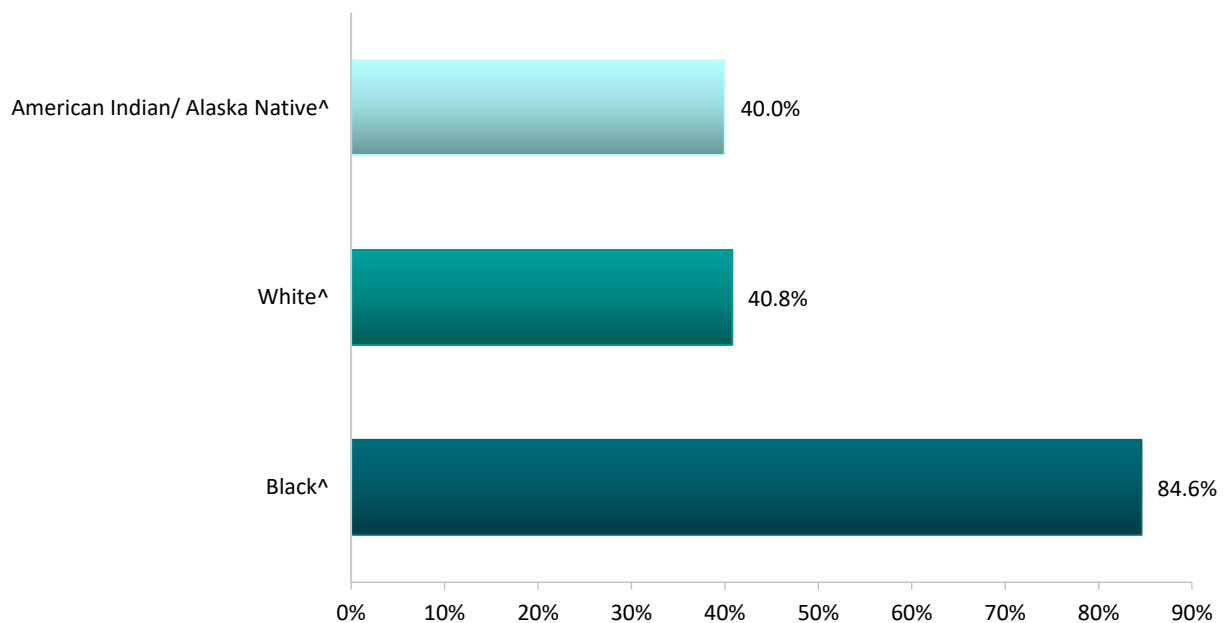
Figure 5. Prevalence of Menthol Cigarette Use*, by Sex, Wisconsin Adults, 2017, 2019, 2021



* Menthol use was assessed among current smokers and former smokers conjointly.

Data: Wisconsin Behavioral Risk Factor Survey, 2017, 2019, 2021

Figure 6. Prevalence of Menthol Cigarette Use*, by Race/Ethnicity, Wisconsin Adults, 2017, 2019, 2021

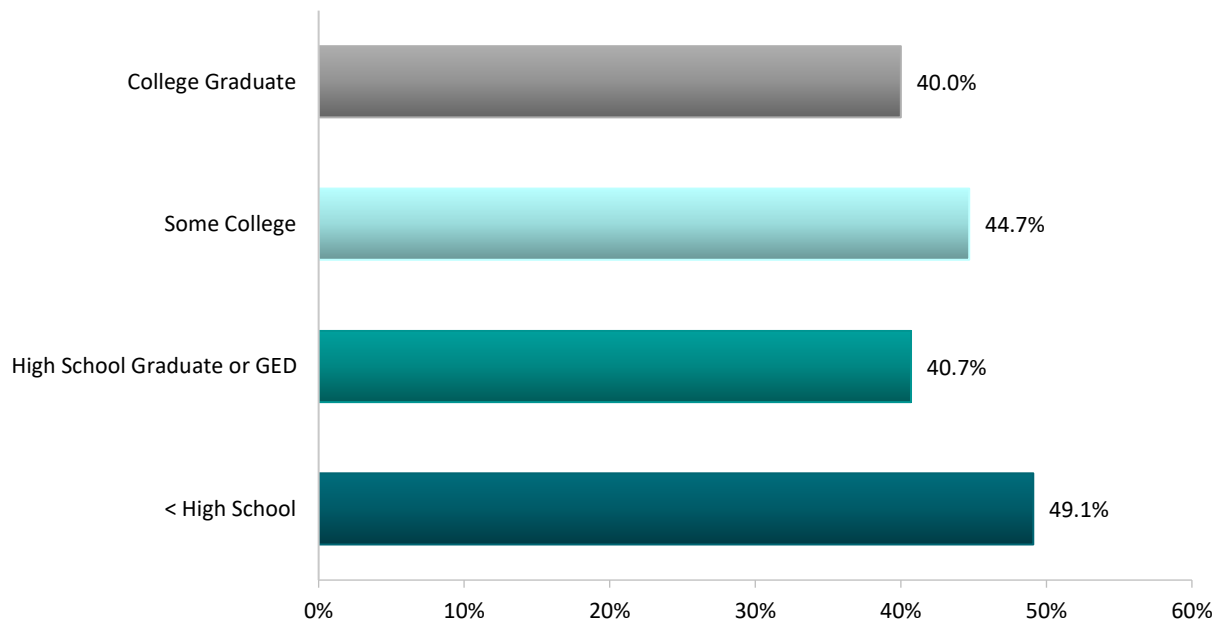


* Menthol use was assessed among current smokers and former smokers conjointly.

^ All racial groups are non-Hispanic. Sample sizes for other racial/ethnic groups are too small to report.

Data: Wisconsin Behavioral Risk Factor Survey, 2017, 2019, 2021

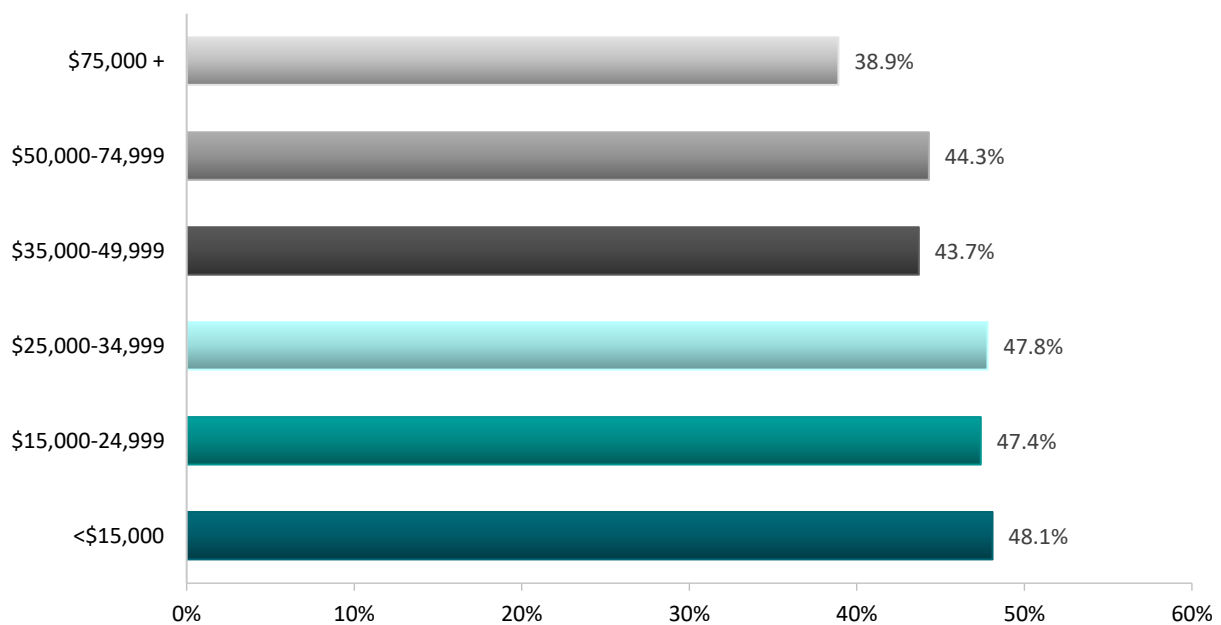
Figure 7. Prevalence of Menthol Cigarette Use*, by Educational Attainment, Wisconsin Adults (aged 25 years or older), 2017, 2019, 2021



* Menthol use was assessed among current smokers and former smokers conjointly.

Data: Wisconsin Behavioral Risk Factor Survey; 2017, 2019, 2021

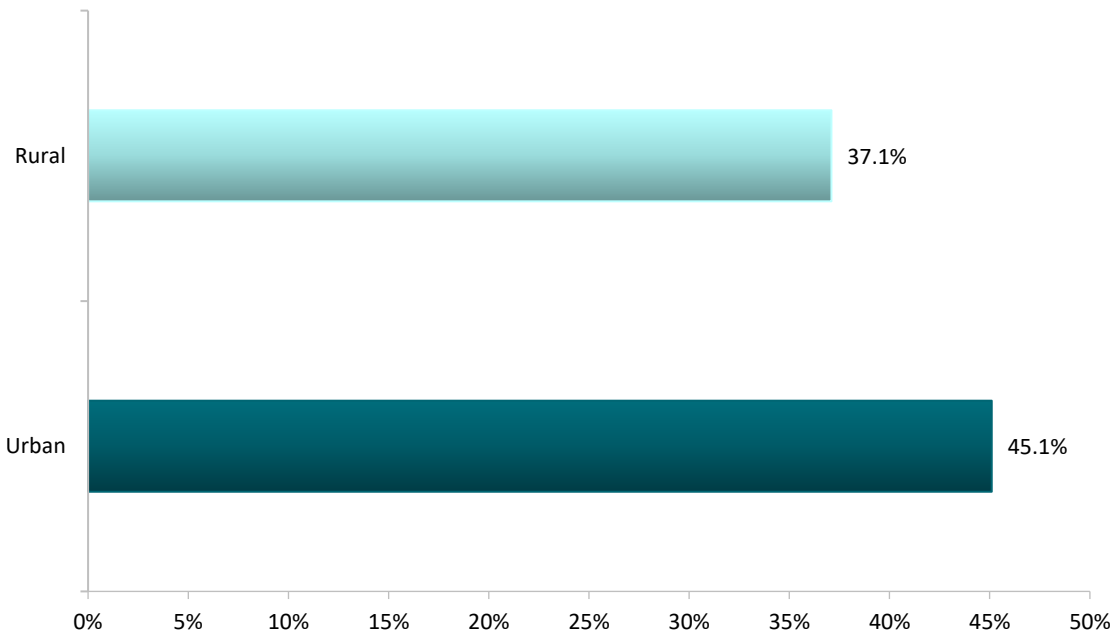
Figure 8. Prevalence of Menthol Cigarette Use*, by Annual Household Income, Wisconsin Adults, 2017, 2019, 2021



* Menthol use was assessed among current smokers and former smokers conjointly.

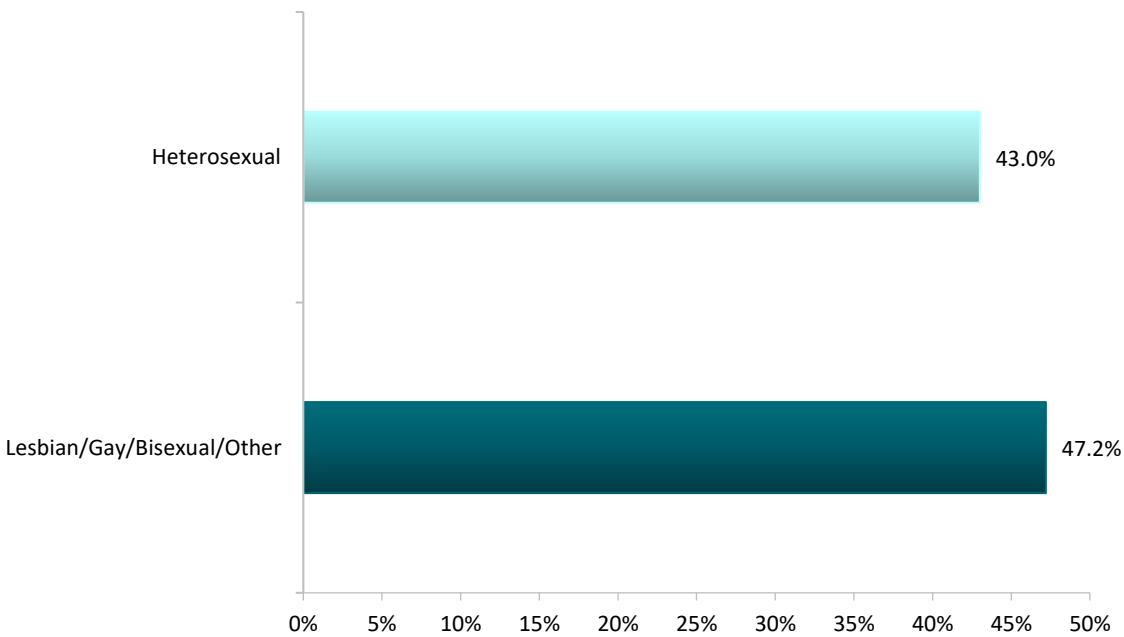
Data: Wisconsin Behavioral Risk Factor Survey; 2017, 2019, 2021

Figure 9. Prevalence of Menthol Cigarette Use*, by Urban/Rural Residence, Wisconsin Adults, 2019 and 2021^



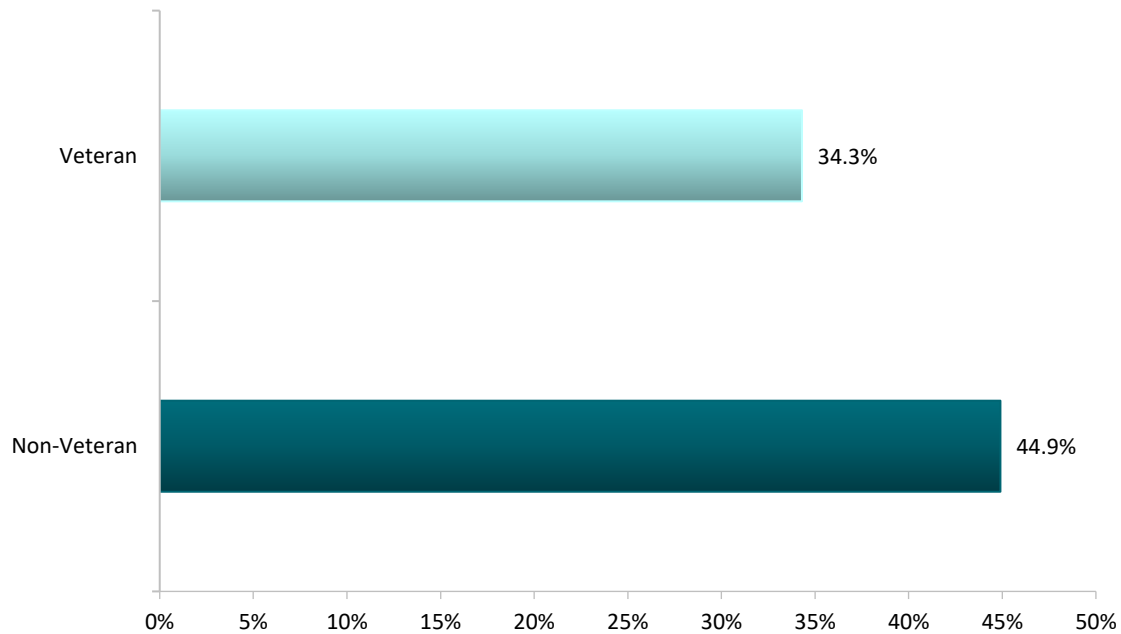
* Menthol use was assessed among current smokers and former smokers conjointly.
Data: Wisconsin Behavioral Risk Factor Survey; 2019, 2021 ^ Comparable data are not available for 2017.

Figure 10. Prevalence of Menthol Cigarette Use*, by Sexual Orientation, Wisconsin Adults, 2017, 2019, 2021



* Menthol use was assessed among current smokers and former smokers conjointly.
Data: Wisconsin Behavioral Risk Factor Survey; 2017, 2019, 2021

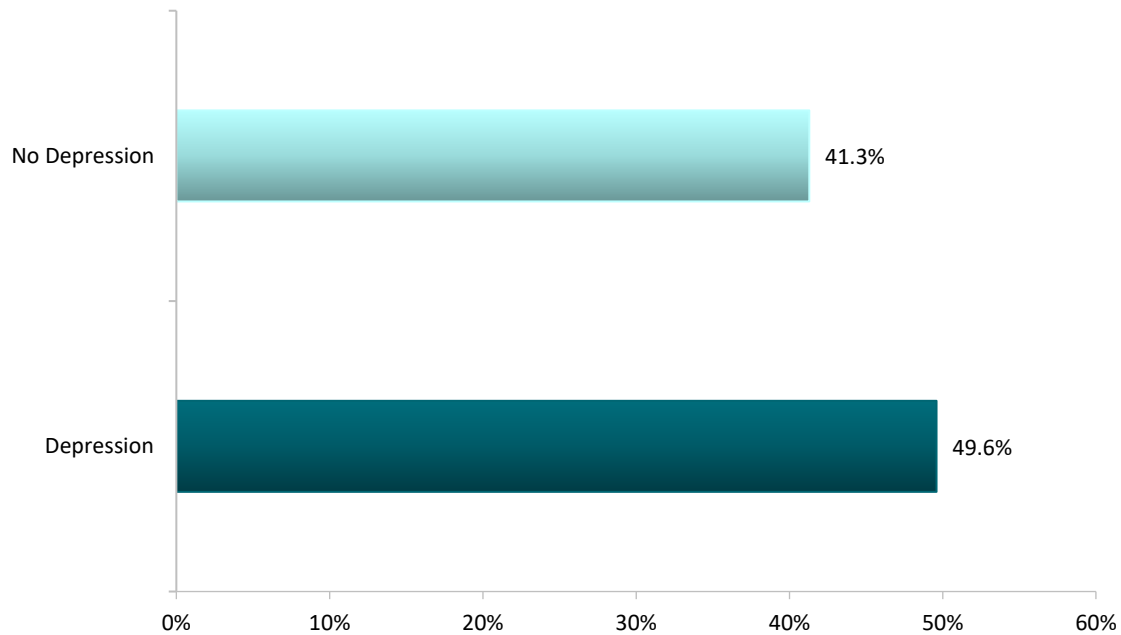
Figure 11. Prevalence of Menthol Cigarette Use*, by Veteran Status, Wisconsin Adults, 2017, 2019, 2021



* Menthol use was assessed among current smokers and former smokers conjointly.

Data: Wisconsin Behavioral Risk Factor Survey; 2017, 2019, 2021

Figure 12. Prevalence of Menthol Cigarette Use*, by Depression^, Wisconsin Adults, 2017, 2019, 2021

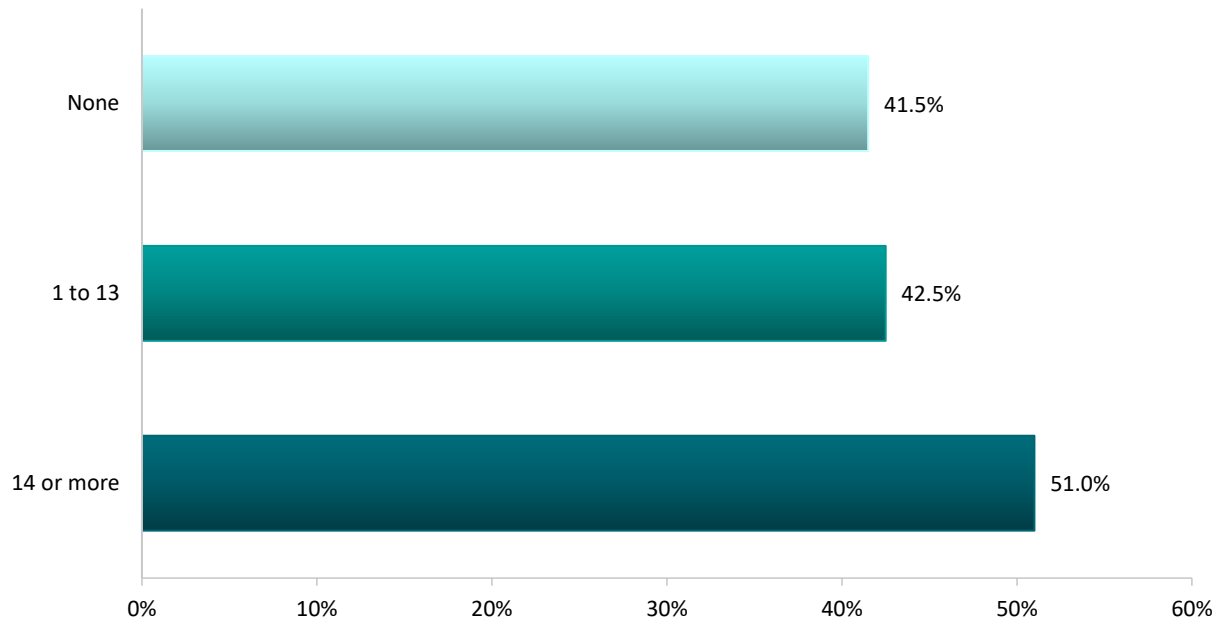


* Menthol use was assessed among current smokers and former smokers conjointly.

^ Depression was assessed with the following question: Has a doctor, nurse, or other health professional ever told you that you have a depressive disorder, including depression, major depression, dysthymia, or minor depression?

Data: Wisconsin Behavioral Risk Factor Survey; 2017, 2019, 2021

Figure 13. Prevalence of Menthol Cigarette Use*, by Number of Poor Mental Health Days^, Wisconsin Adults, 2017, 2019, 2021



* Menthol use was assessed among current smokers and former smokers conjointly.

^ The number of poor mental health days was assessed with the following question: Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?

Data: Wisconsin Behavioral Risk Factor Survey; 2017, 2019, 2021

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4. https://www.cdc.gov/tobacco/basic_information/menthol/index.html [Last accessed March 28, 2024].

DATA SOURCE

Wisconsin Behavioral Risk Factor Surveillance System (BRFSS). All the data used in this report are from the Wisconsin Behavioral Risk Factor Survey (BRFS). The survey is conducted by the Wisconsin Department of Health Services, Division of Public Health, Office of Health Informatics. At the national level, the Behavioral Risk Factor Surveillance System is overseen by the Centers for Disease Control and Prevention. The corresponding survey is conducted in all 50 states, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, and Guam. It is the world's largest, on-going telephone health survey system, tracking health conditions and risk behaviors in the United States. Wisconsin has participated in the survey since its inception in 1984.

Three years of Wisconsin BRFS data were used for this report: 2017, 2019, and 2021.