Evaluating the outcomes of the menthol cigarette ban in England by comparing menthol cigarette smoking among youth in England, Canada, and the US, 2018-2020

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Abstract
Importance: Menthol cigarettes were prohibited in England in May 2020 and nationally in Canada in October 2017 but remain permitted in the US. Evidence on the outcomes of menthol cigarette bans among youth outside of Canada, and the characteristics of youth smokers, is lacking.

Objectives: To evaluate the outcomes of menthol cigarette bans on youth menthol cigarette smoking and to characterize youth menthol cigarette smokers in terms of demographics and cigarette consumption and dependence.

Design, Setting, and Participants: This survey study uses data from online repeat cross-sectional International Tobacco Control Youth Tobacco and Vaping Surveys conducted in 2018, 2019, February 2020, and August 2020. Participants included past 30-day smokers aged 16 to 19 years. Data analysis was performed from March 2021 to January 2022.

Main Outcomes and Measures: Usually smoke a brand of cigarettes that was menthol, including capsule.

Exposures: Menthol cigarette ban, comparing 3 countries over time: Canada, where a ban already existed, England, where a ban was implemented during the study, and the US, where no national ban was present. Age, sex, race, and consumption and dependence were also examined by menthol smoking in each country, and in England before vs after the ban.

Results: The analytical sample comprised 7067 participants aged 16 to 19 years, of whom 4129 were female and 5019 were White. In England, the weighted percentage of youth smokers who reported smoking a menthol or capsule cigarette brand was stable in the 3 survey waves before the menthol ban (2018 to February 2020, 9.4% vs 12.1%; adjusted odds ratio [AOR], 1.03; 95% CI, 0.99-1.06; P = .15) but decreased to 3.0% after the ban (February 2020 vs August 2020, AOR, 1.07; 95% CI, 1.04-1.10; P < .001). The decrease between February and August 2020 in England was similar across all demographic groups but was greater among youth who perceived themselves as addicted to cigarettes (AOR, 0.37; 95% CI, 0.41-0.97; P = .04). In the 2 comparison countries, menthol or capsule smoking was stable across all waves (2018 to August 2020: US, 33.6%-36.9%; Canada, 3.1%-2.3%) and was more prevalent in the US than in England (AOR, 5.58; 95% CI, 4.63-6.72; P < .001). Menthol or capsule smoking was also more prevalent among smokers in England who were female vs male (10.9% vs 7.2%; AOR, 1.04; 95% CI, 1.01-1.06; P = .002); among smokers in the US who identified as Black vs White (60.6% vs 31.9%; AOR, 1.33; 95% CI, 1.23-1.44; P < .001) or who were frequent smokers (AOR, 1.07; 95% CI, 1.01-1.13; P = .03), smoked more cigarettes per day (2-5 vs 1, AOR, 1.09; 95% CI, 1.02-1.15; P = .006; >5 vs 1, AOR, 1.10; 95% CI, 1.03-1.18; P = .007), or had urges to smoke every or most days (AOR, 1.08; 95% CI, 1.02-1.14; P = .006); and among smokers in Canada who perceived themselves as addicted to cigarettes (AOR, 1.02; 95% CI, 1.00-1.03; P = .01).

Conclusions and Relevance: In this survey study, the proportion of youth smokers who smoke menthol (including capsule) cigarettes decreased substantially after the menthol ban in England. This association was consistent across all demographic groups. Perceived addiction among menthol smokers was also lower where menthol cigarettes were banned.
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