

New Data: MASS MENTHOL BAN LOWERED ALL CIGARETTE SALES American Cancer Society Releases Findings on Association of Cigarette Sales with Comprehensive Menthol Flavor Ban in Massachusetts

ATLANTA, GA (January 4, 2022) - Massachusetts' comprehensive menthol flavor ban, implemented in June 2020, tremendously decreased menthol and all (menthol and nonflavored) cigarette sales, even with a slight increase in nonflavored cigarette sales. The findings are published via a brief research letter in *JAMA Internal Medicine*.

The authors used NielsenIQ Retail Scanner Data (NRSD) of sales volumes (reported in 4-week cycles) of menthol and nonflavored cigarette brands sold by US-based retailers from January 2017 to July 2021. Temporal changes of per capita packs of menthol, nonflavored, and all cigarette sales from Massachusetts were compared to changes in the 27 states in the NRSD that did not implement state or local menthol flavor bans using before (January 2017 to May 2020) and after (June 2020 to July 2021) design with a difference-in-differences method. The analyses controlled for state-level time-varying sociodemographic characteristics, obtained from the US Census Bureau Basic Monthly Population Survey, cigarette prices, seasonality, and state-level time-invariant factors.

Led by Samuel Asare, Ph.D., at the American Cancer Society, the study showed that Massachusetts benefitted significantly from the comprehensive flavor ban by reducing overall (menthol and nonflavored) cigarette sales. "Overall, the adjusted 4-week sales of cigarettes decreased by 282.65 (95% CI, -356.07 to -209.23; $P < .001$) packs per 1000 people in Massachusetts vs the comparison states." This decrease in overall cigarette sales was driven by significant decreases in menthol cigarette sales, although it was partially offset by increases in nonflavored cigarette sales. As the study reported: "After the flavor ban, the adjusted 4-week sales of cigarettes in Massachusetts vs the comparison states decreased by 372.27 (95% CI, -428.90 to 315.64; $P < .001$) packs per 1000 people for menthol cigarettes but increased by 120.25 (95% CI, 72.61 to 167.88; $P < .001$) packs per 1000 people for nonflavored cigarettes."

The study is the first to show a decrease in cigarette consumption in Massachusetts after the flavor ban, even with possible switches to nonflavored cigarettes. As the Food and Drug Administration plans to implement a nationwide menthol flavor ban which could result in significant declines in cigarette sales if the US has the same experience as Massachusetts, policies and interventions need to address potential switching to use nonflavored cigarettes to maximize the effectiveness of the federal menthol flavor ban in reducing cigarette smoking.

Reference

Asare, S., Majmundar, A., Westmaas, L. J., Bandi, P., Xue, Z., Jemal, A., & Nargis, N. (2022). Association of Cigarette Sales with Comprehensive Menthol Flavor Ban in Massachusetts. *JAMA Internal Medicine*.
(https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/10.1001/jamainternmed.2021.7333?guestAccessKey=9b153455-0934-44b7-9c11-9a279719806a&utm_source=For_The_Media&utm_medium=referral&utm_campaign=ftm_links&utm_content=tf&utm_term=010422).

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