Role of Flavor Variety in Tobacco Harm Reduction

A Fresh Look

Elizabeth Becker | Sr. Director, Population Science June 20, 2025

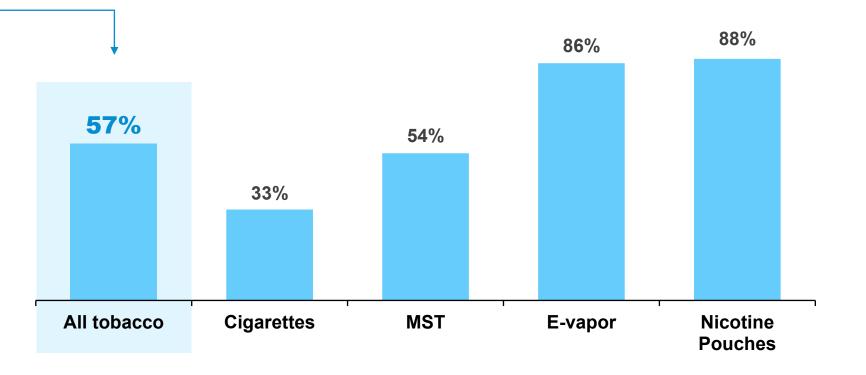
Landscape: Flavored tobacco products in the U.S. marketplace

Benefit: Role of flavors in switching among adults who smoke

Risk: Underage use trends

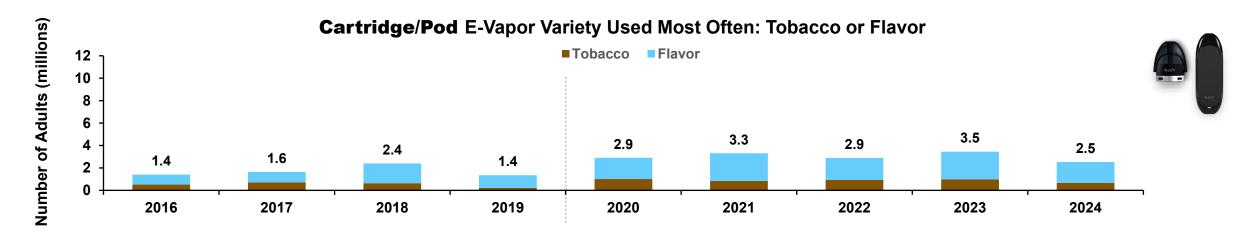


Of the approximately 49 million adult tobacco consumers in the US, about 28 million, or 57%, use flavors most often Percentage of ATCs by Category Using Menthol/Flavors Most Often in 2024 (ATCT)



Source: ALCS Adult Tobacco Consumer Tracker (2025-AH-29 ATCT)

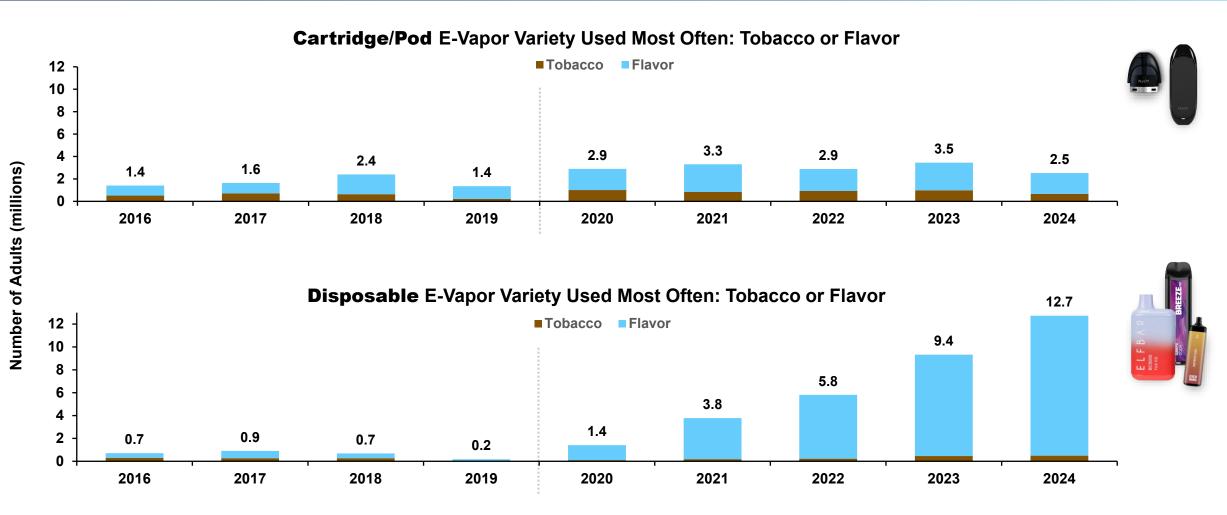
Adult Tobacco Consumer Demand for Flavor Is Strong



Source: ALCS Adult Tobacco Consumer Tracker (2025-AH-29 ATCT). Among current cartridge/pod e-vapor users. Flavor questions modified for 2019, 2023 data collection. E-Vapor flavors: menthol, mint, coffee, mocha crème or chai, fruit, blend of different flavors. 2023 data are based on 10 moving months instead of 12.

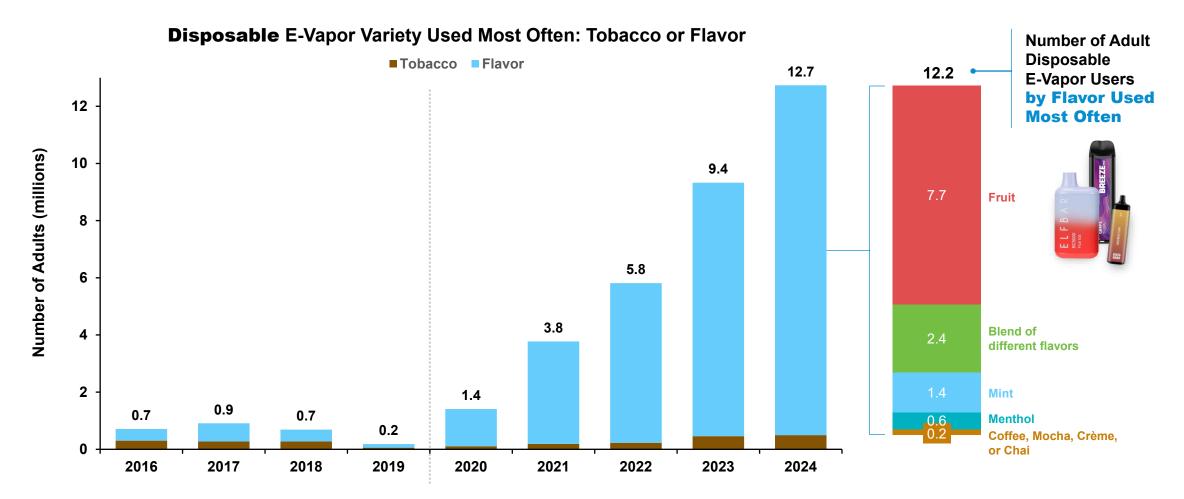


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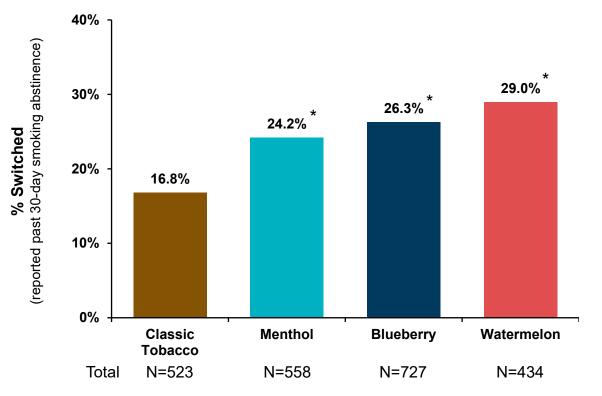
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Flavor Plays Important Role in Switching NJOY® E-vapor

Findings from an In-Market Longitudinal Cohort Study

Complete Switching at 3 Months by Initial Flavor Used (based on those completing the survey at 3 months)





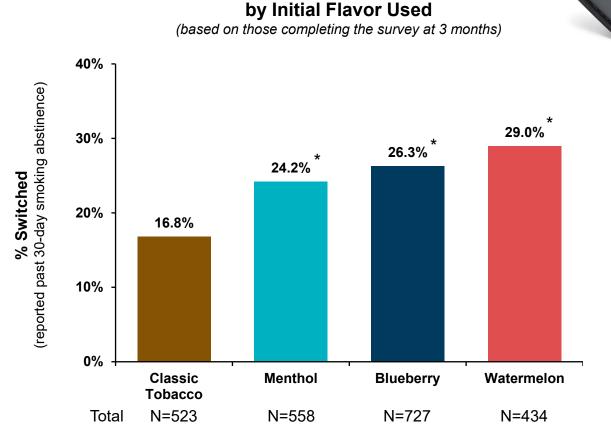
* Indicates statistically significant difference compared to Classic Tobacco



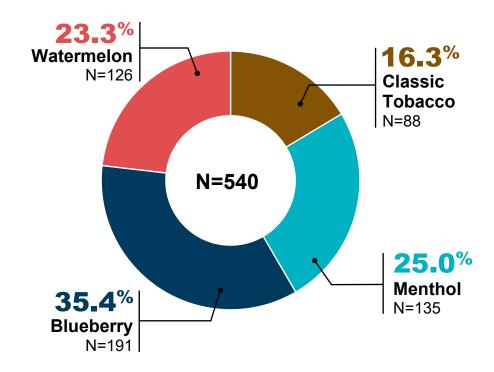
Flavor Plays Important Role in Switching NJOY[®] E-vapor

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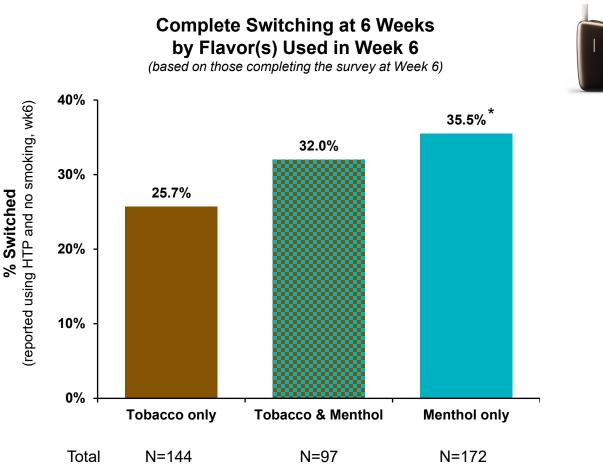
Proportion of Complete Switchers at 3 Months by Initial Flavor Used (based on those completing the survey at 3 months)



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Flavor Plays Important Role in Switching Ploom[®] HTP System

Findings from ad libitum, extended at-home Actual Use Study



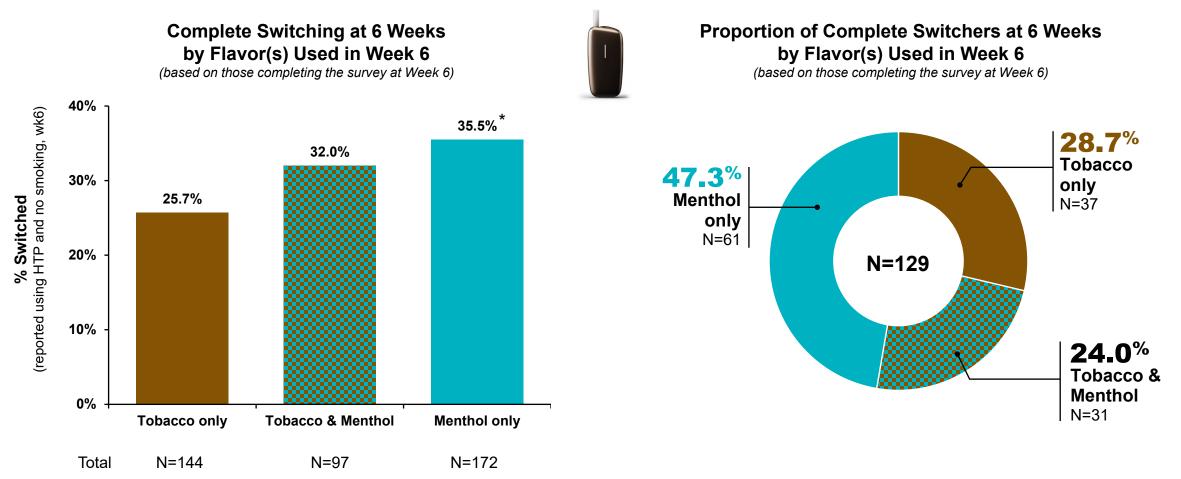
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Horizon Innovations LLC is a joint venture between Philip Morris USA Inc. and JTI (US) Holding Inc. for the commercialization of Ploom® in the U.S. market.



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Flavor Plays Important Role in Liking and Smoke-free Days on!® Nicotine Pouch

Findings from a Randomized Controlled Study

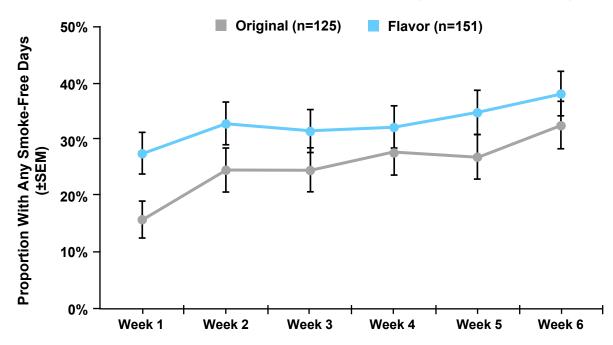


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Findings from a Randomized Controlled Study



Proportion of Participants with Any Smoke-Free Days



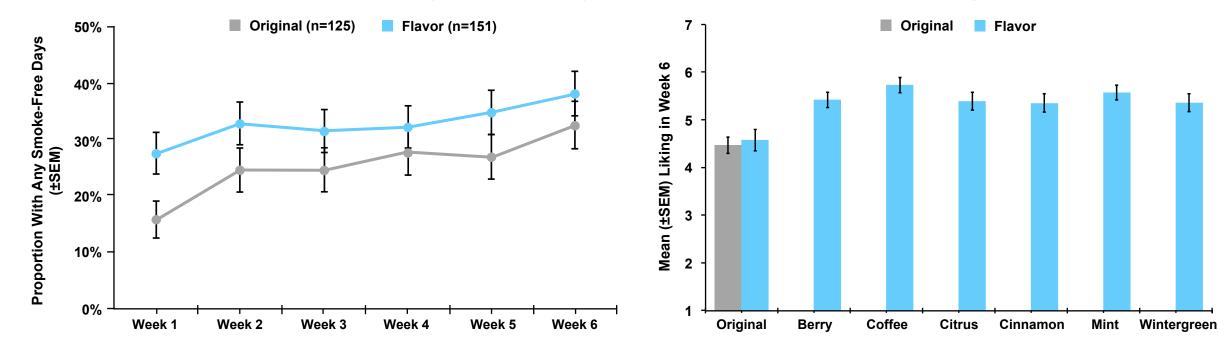
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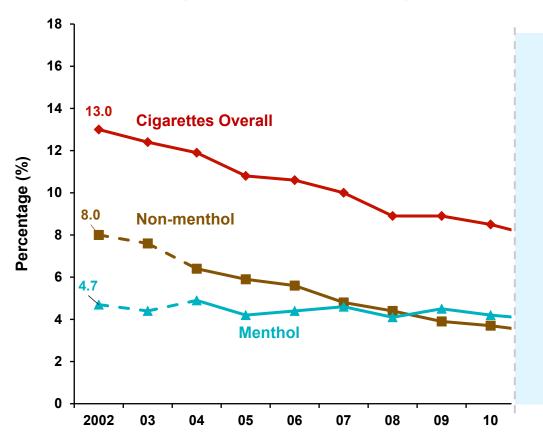


Proportion of Participants with Any Smoke-Free Days

Product Liking at Week 6



Current Cigarette Smoking among 12–17-year-olds Overall and by Menthol/Non-Menthol Type (NSDUH)



NSDUH: National Survey on Drug Use and Health.

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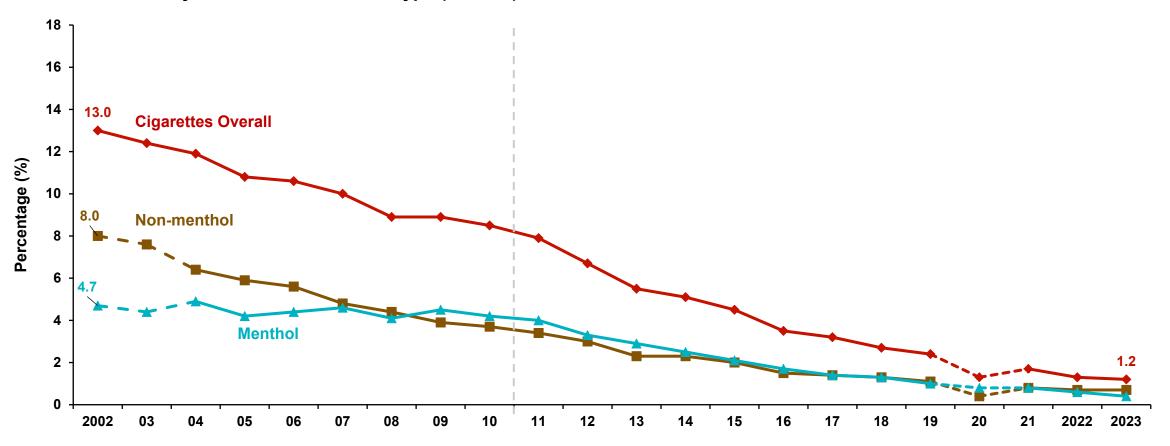
From the available studies, the weight of evidence supports the conclusion that menthol in cigarettes is likely associated with increased initiation and progression to regular cigarette smoking.

FDA. Preliminary Scientific Evaluation of the Possible Public Health Effects of Menthol Versus Nonmenthol Cigarettes, 2013 (p. 5); "of" omitted

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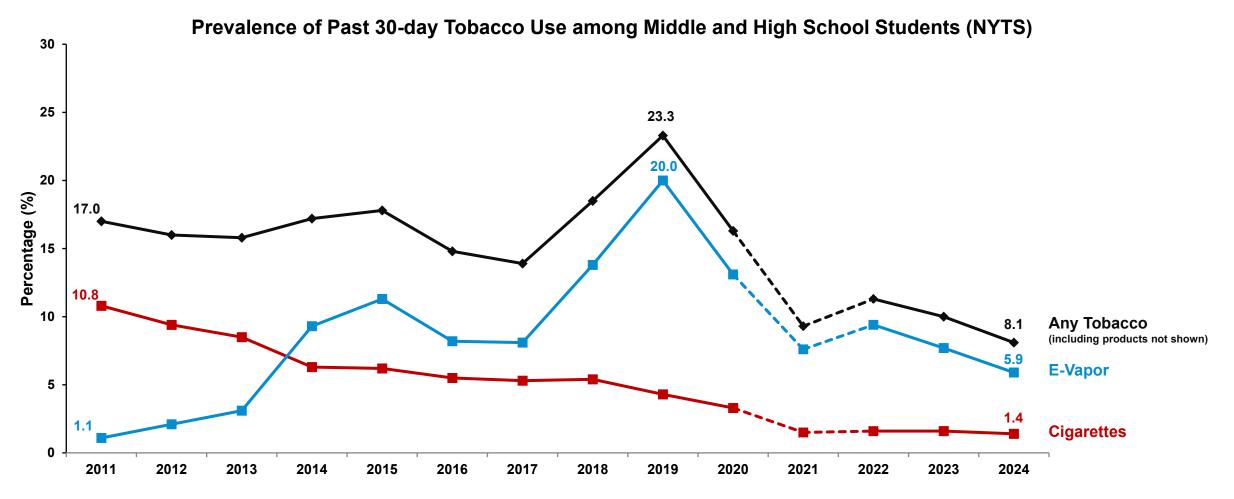
Youth Smoking Has Declined Substantially Despite the Availability of Menthol Cigarettes

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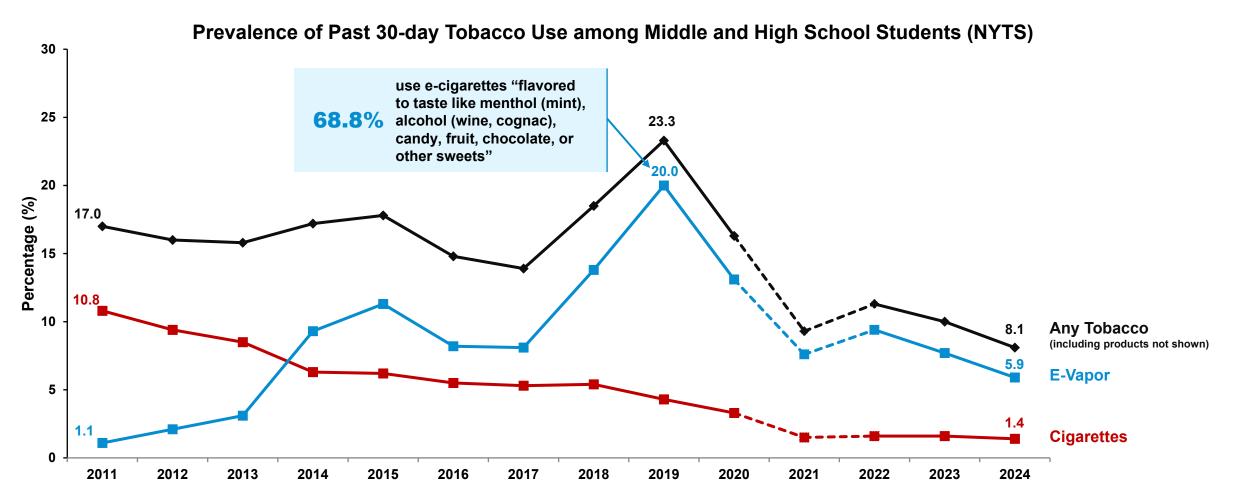
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Youth E-vapor Use Has Declined Significantly Despite Larger Proportion of Flavor Use Compared to the Recent Peak Year



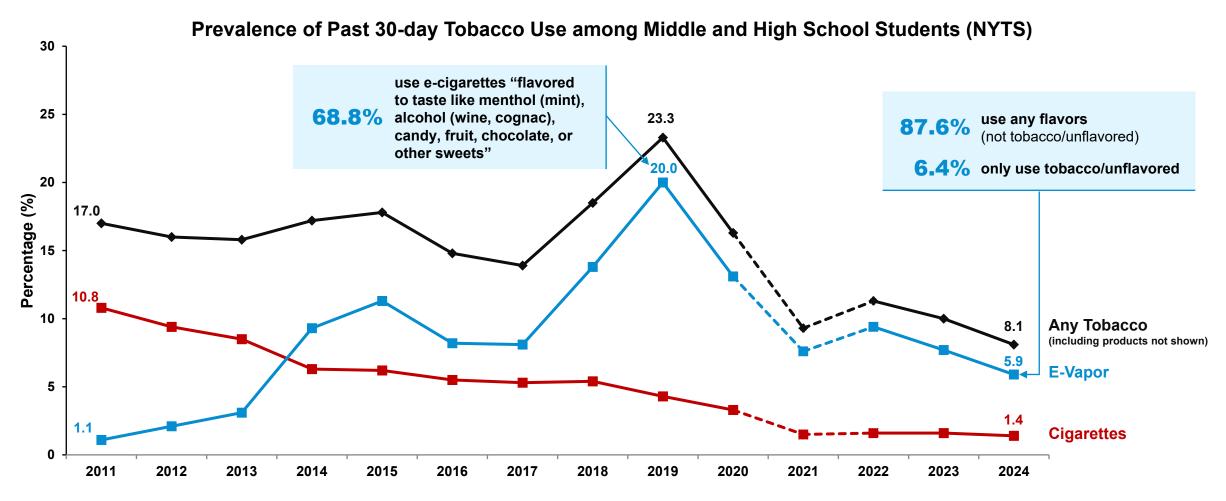
Sources: ALCS analysis of NYTS 2011-2021, Tobacco Product Use Among Middle and High School Students — United States, 2022, Tobacco Product Use Among U.S. Middle and High School Students — National Youth Tobacco Survey, 2023, and Notes from the Field: E-Cigarette and Nicotine Pouch Use Among Middle and High School Students — United States, 2024

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Conclusions

Consumer-centric approach, including flavor choice and availability, can accelerate harm reduction and minimize unintended consequences

Strong demand for flavors among adult tobacco consumers (ATCs)

Flavor options broaden ATC appeal and facilitate transitioning away from smoking

Underage prevalence can decline without flavor prohibition

Acknowledgements

Special acknowledgements to my collaborators:

Josh Karelitz, Ed Largo, Derek Pope, Kate Vergara, and Lai Wei