

Recent Trends in Nicotine Product Use By Flavors

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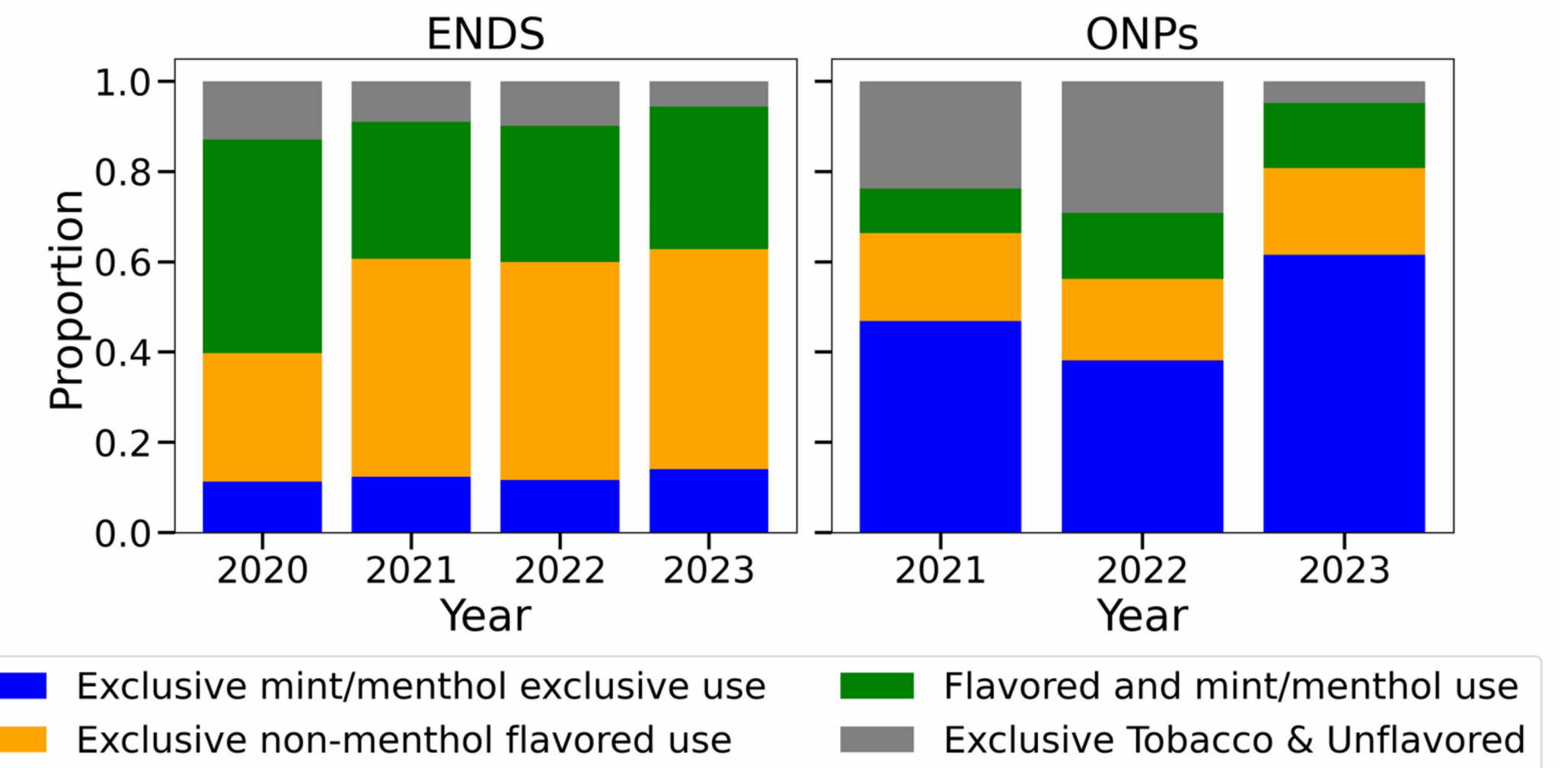
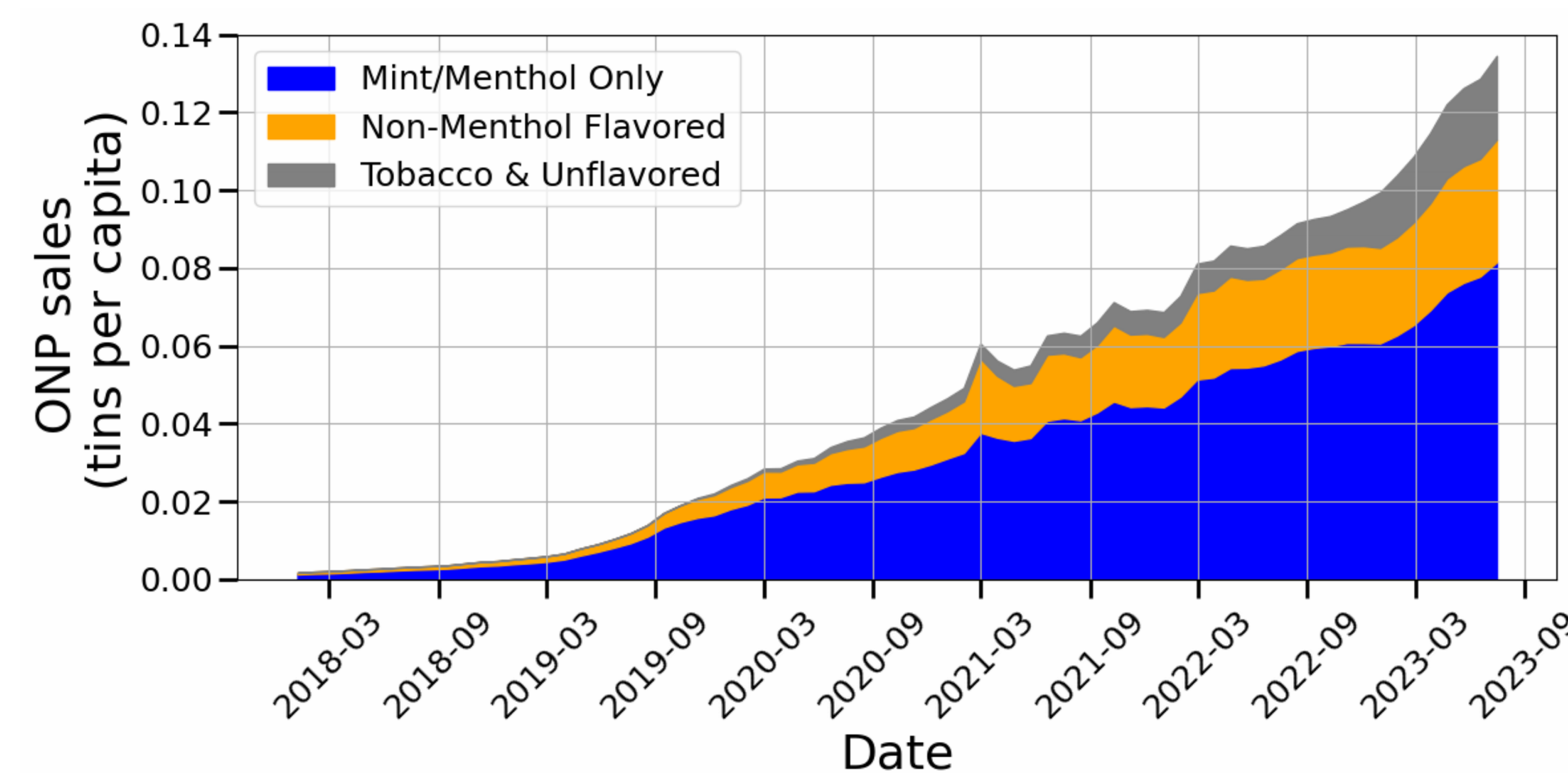
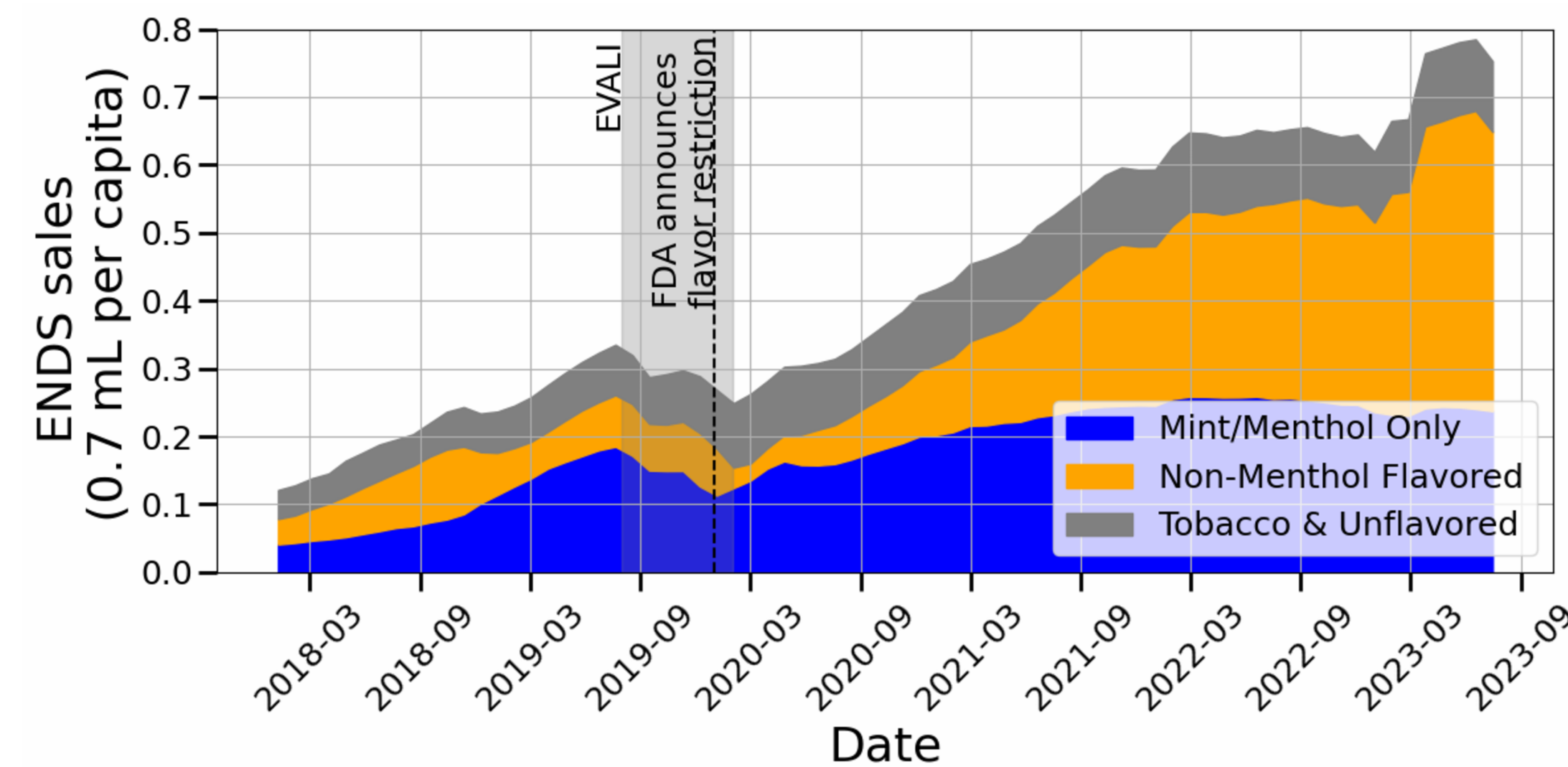
Introduction

- The past twenty years has seen rapid evolution in the tobacco market with the introduction of e-cigarettes (ENDS) and oral nicotine pouches (ONPs).
- Both ENDS and ONPs come in many different flavors which may appeal to youth driving increased state and local regulation of ENDS flavors.
- Documenting trends in the past five years is vital for identifying emerging trends, in order to clarify the public health implications of use and regulatory needs.
- We characterize time trends in US ENDS and ONP sales from 2018 to 2023, overall and by flavor.

Methods

- Retail sales data from Information Resources Inc. covering 40 US states was analyzed in 4-week increments from January 7, 2018 - July 12, 2023, by Universal Product Code (UPC).
- Per capita volume sales were calculated by matching UPCs to product volume.
- Flavors were characterized into three distinct categories:
 - (1) Non-menthol flavors (e.g., fruit, alcoholic drinks, coffee)
 - (2) Mint/menthol-only flavors
 - (3) Tobacco/unflavored
- Youth use of the three flavor profiles were established for ENDS (2018-2023) and ONPs (2020-2023) from the National Youth Tobacco Survey (NYTS).

Results



Conclusions

- Sales of ENDS and ONPs increased over the observed period and across all flavor categories.
- Non-menthol flavored ENDS products led in sales and youth use, while mint/menthol flavored ONPs showed the same trend.
- ENDS sales trends changed concurrent to the EVALI outbreak and the FDA announcement on flavor restrictions. Both decreases were temporary.
- Across both product types, tobacco and unflavored products are the least popular, suggesting that flavor restrictions could influence market trends and youth usage.
- Sales trends and youth behaviors show a correlation, but further research is needed to confirm any causal link.