The Impact of the Tobacco Flavor Ban in New York State

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BACKGROUND

- Flavored tobacco products (smoking, vaping, cigars) are designed to enhance the user's experience with strong chemicals
- New York State instituted a ban on the sale of all flavored nicotine vapor products in 2020
- Study Aim: Assess e-cigarette use pre- and post- flavor ban in New York to evaluate the impact

METHODS

- Analyzed the 2017 and 2021 Behavioral Risk Factor Surveillance System (BRFSS) questionnaires regarding e-cigarette use in New York State
- Percentage estimates of e-cigarette use, confidence intervals, and weighted sample sizes were collected for selected demographic variables
- Differences in percentage of e-cigarette users were assessed using Z-test for proportions and confidence interval overlap
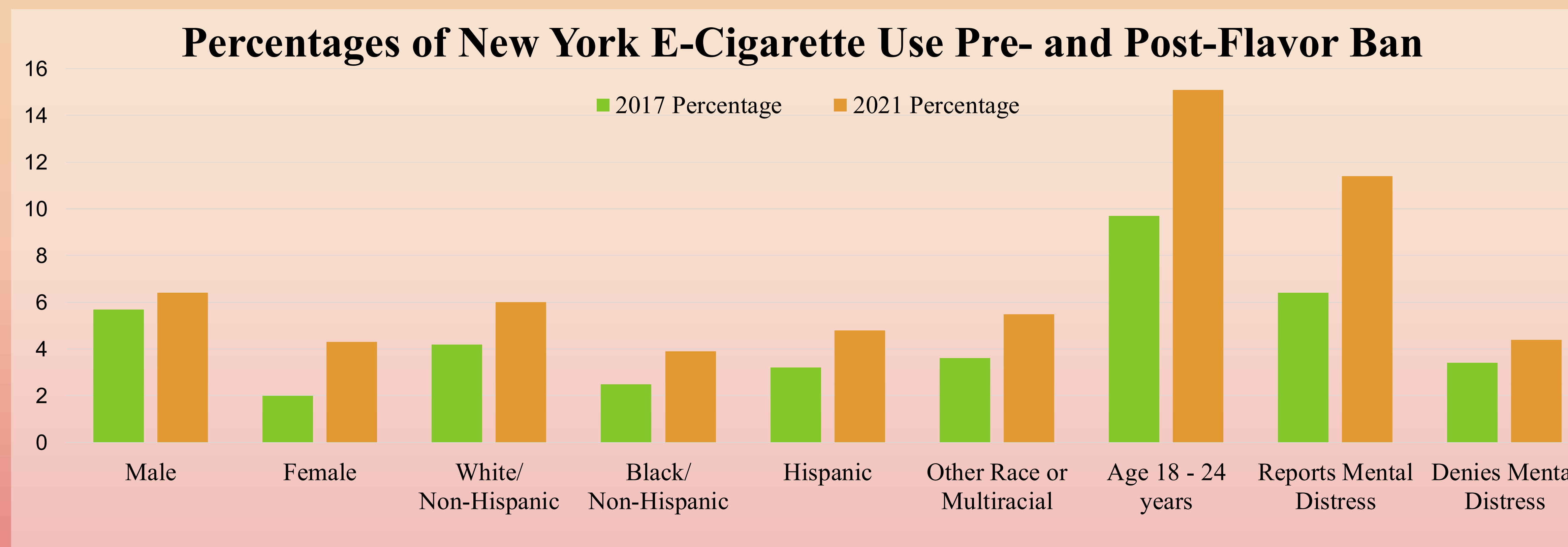- Z-scores of >1.96 (95% confidence) indicated statistical significance

E-Cigarette Use Pre- and Post- Flavor Ban in New York State
(n's range from 49,000 to 546,000)

Population	Increase in Prevalence from 2017 – 2021 (%)	Confidence Interval Overlap*	Z-Score**
Male	0.7	Yes	13.47
Female	2.3	No	45.26
White / Non-Hispanic	1.8	No	37.05
Black / Non-Hispanic	1.4	Yes	14.02
Hispanic	1.6	Yes	15.95
Other Race or Multiracial	1.9	Yes	19.04
Age 18 - 24 years	5.4	Yes	52.65
Reports Mental Distress	5.0	No	57.93
Denies Mental Distress	1.0	Yes	19.27

* Confidence Interval Overlap indicates a less relevant sample size differential
** Z-score > 1.96 (95% confidence) indicated statistical significance

Percentages of New York E-Cigarette Use Pre- and Post-Flavor Ban

Legend: 2017 Percentage · 2021 Percentage

RESULTS

- Prevalence increased for all groups assessed
- All Z-scores were statistically significant
- Lack of confidence interval overlap revealed practically relevant differences in women, White/non-Hispanic persons, and persons who reported mental distress

DISCUSSION

- There was an increase in the prevalence of e-cigarette use in all groups assessed, despite the 2020 flavor ban
- Hypothesized prevalence decreases due to the ban may be overshadowed by other factors: COVID, social media modeling, little / no flavor ban enforcement, and access to out-of-state products
- This may be the first assessment of flavor ban impact using the BRFSS. Such analyses should be done periodically to inform policy development and impact