

Early Trends in Flavored Electronic Cigarette Use Among NYS Youth Following the Flavor Restriction, 2020

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BACKGROUND

- The availability of various flavored electronic cigarettes (e-cigs) is enticing to both new consumers and established cigarette smokers.¹⁻⁵
- Flavor additives in e-cigs have been shown to reduce the harshness of the nicotine taste, which allows for increased inhalation, increased nicotine delivery, increased appeal, and promotes experimentation among youth.⁶⁻¹³
- Reducing youth e-cig use is a New York State (NYS) public health priority.¹⁴
- In May 2020, a statewide restriction on flavored e-cigs, except tobacco flavor, was passed in NYS, and during this time, the US was experiencing the COVID-19 pandemic.
- The purpose of this study is to examine changes in nicotine product use behavior and perceptions among youth before and after the statewide vaping flavor restriction policy.

METHODS

- NYS data were analyzed cross-sectionally from Feb (N=955) to Aug 2020 (N=946) of the US ITC Youth Tobacco and Vaping Survey, which is conducted among youth 16-19 years recruited from US Nielsen consumer panels.
- Past 30-day use of cigarettes, e-cigs, little cigars/cigarillos, cigars, bidis, smokeless, nicotine replacement therapy, oral nicotine products, and waterpipe were assessed at each wave. E-cig flavor used most often, product type, and reasons for vaping were asked of past 30-day vapers.
- The association of COVID-19 and vaping behavior and product access were evaluated in Aug 2020 with study weights.
- Weighted descriptive statistics and regression models were used to describe changes from Feb to Aug 2020 in nicotine product use behavior and perceptions. Models were adjusted for sex, race/ethnicity, and perceived family SES.

RESULTS

- Past 30-day e-cig use dropped from 20% to 15% (p=0.0198) after the vaping flavor restriction policy, and they were significantly less likely to vape in the past 30-days in Aug 2020 (aOR: 0.71; 95%CI: 0.53, 0.94).
- Past 30-day cigarette use prevalence did not significantly change (6.8% to 8.2%), nor did past 30-day dual use of e-cigs and cigarettes (4.5% to 5.4%).
 - An increase in past 30-day vapers reporting that the reason they are using e-cigs is to cut down on the number of cigarettes smoked (5% to 11%; p=0.0203) and to help stay quit (4% to 9%; p=0.0335) was observed.
- Most past 30-day vapers reported using any non-tobacco flavored e-cig, with fruit being the most popular at both waves (Fig 1, 2, & 3), despite the restriction.
 - Youth were buying their e-cig products for themselves more frequently from vape shops versus retail stores (e.g., gas stations/convenience stores) following the flavor restriction (74.6% vs. 80.0%), albeit insignificant.
- In Aug 2020, over a third of vapers reported that they were vaping less, intended to, or quit vaping and found it difficult to access their e-cig products due to COVID-19 (Fig 4).

RESULTS (cont'd)

Figure 1: Exclusive tobacco flavor use in the past 30-days

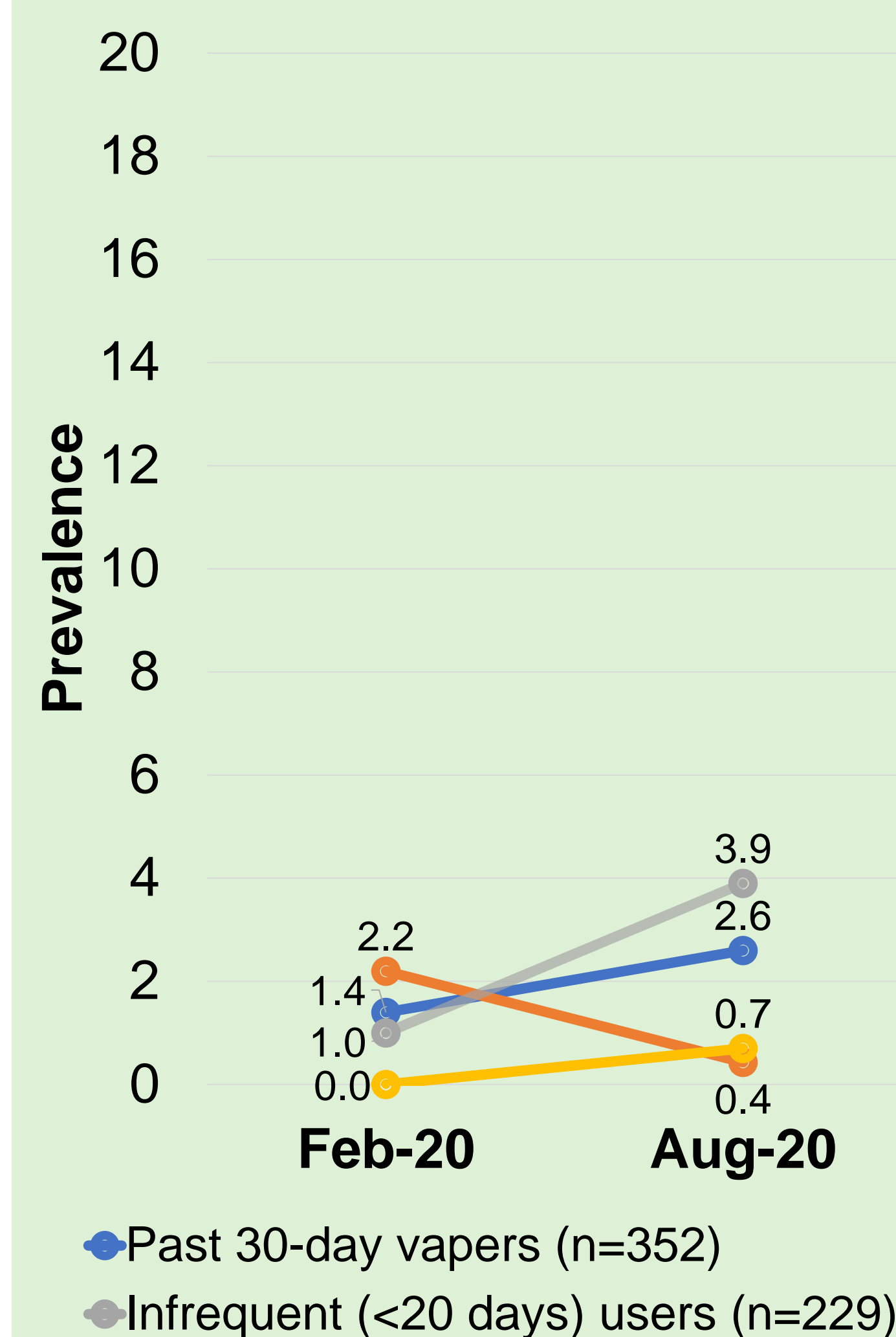


Figure 2: Any non-tobacco flavor use in the past 30-days

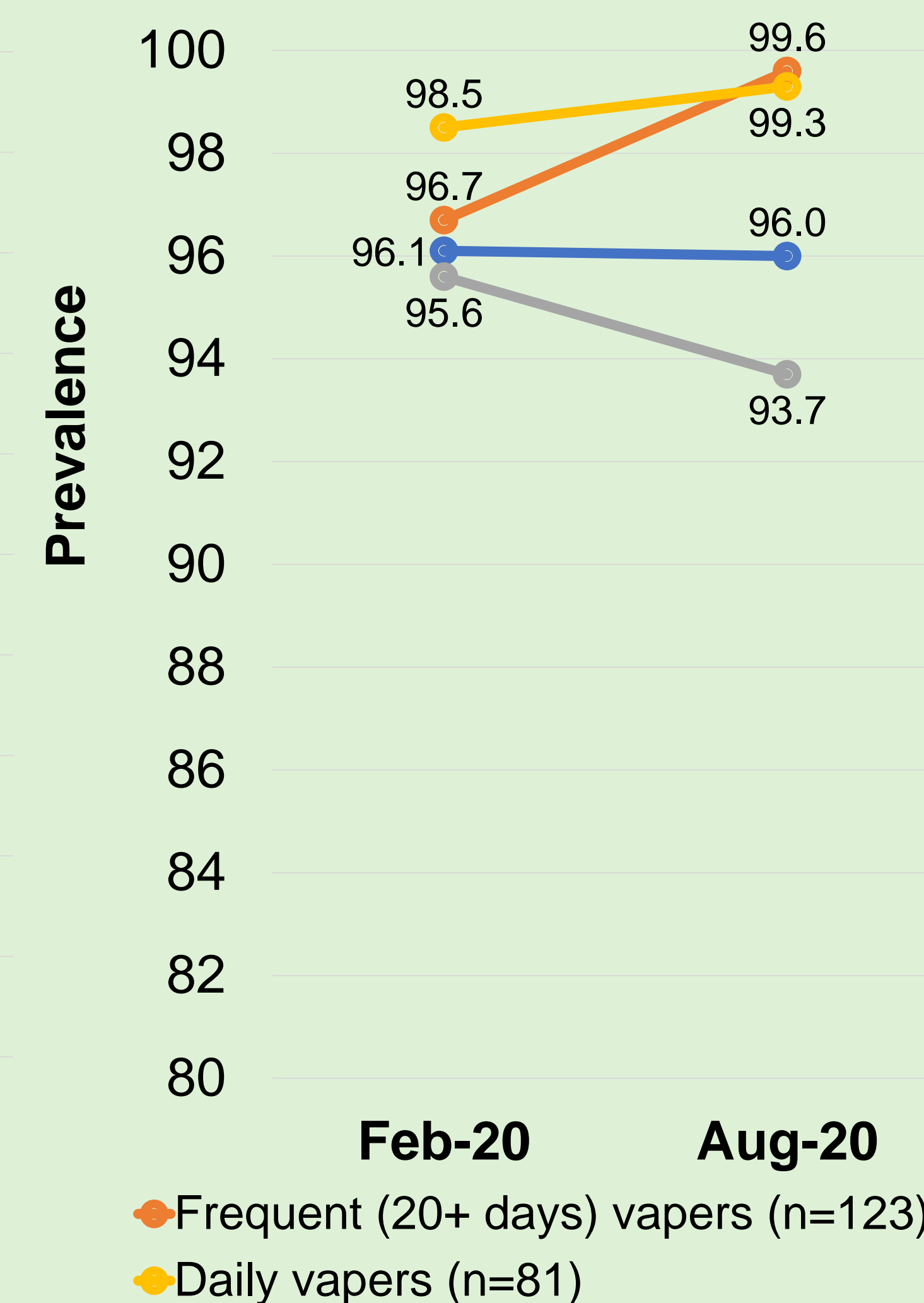
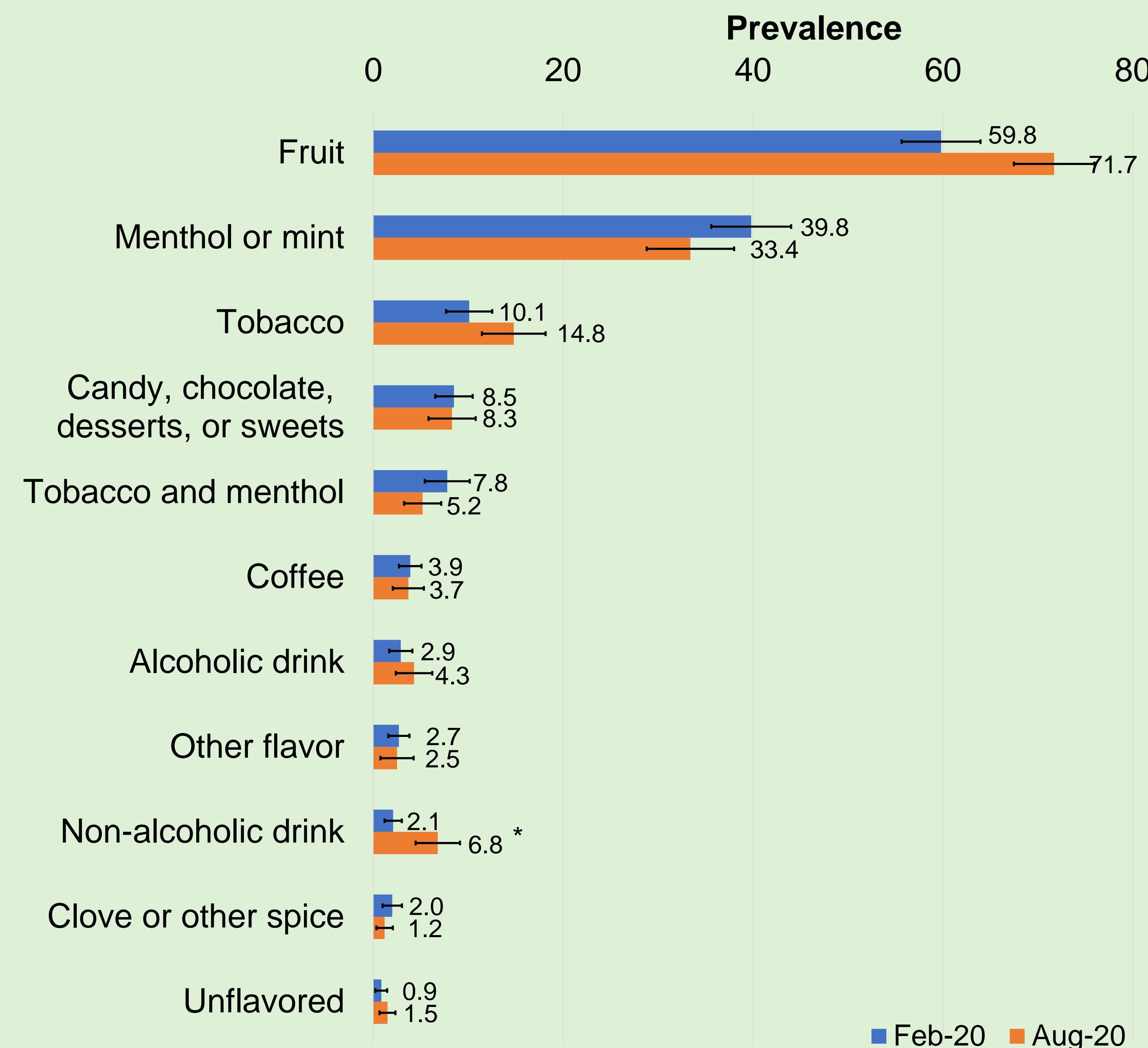


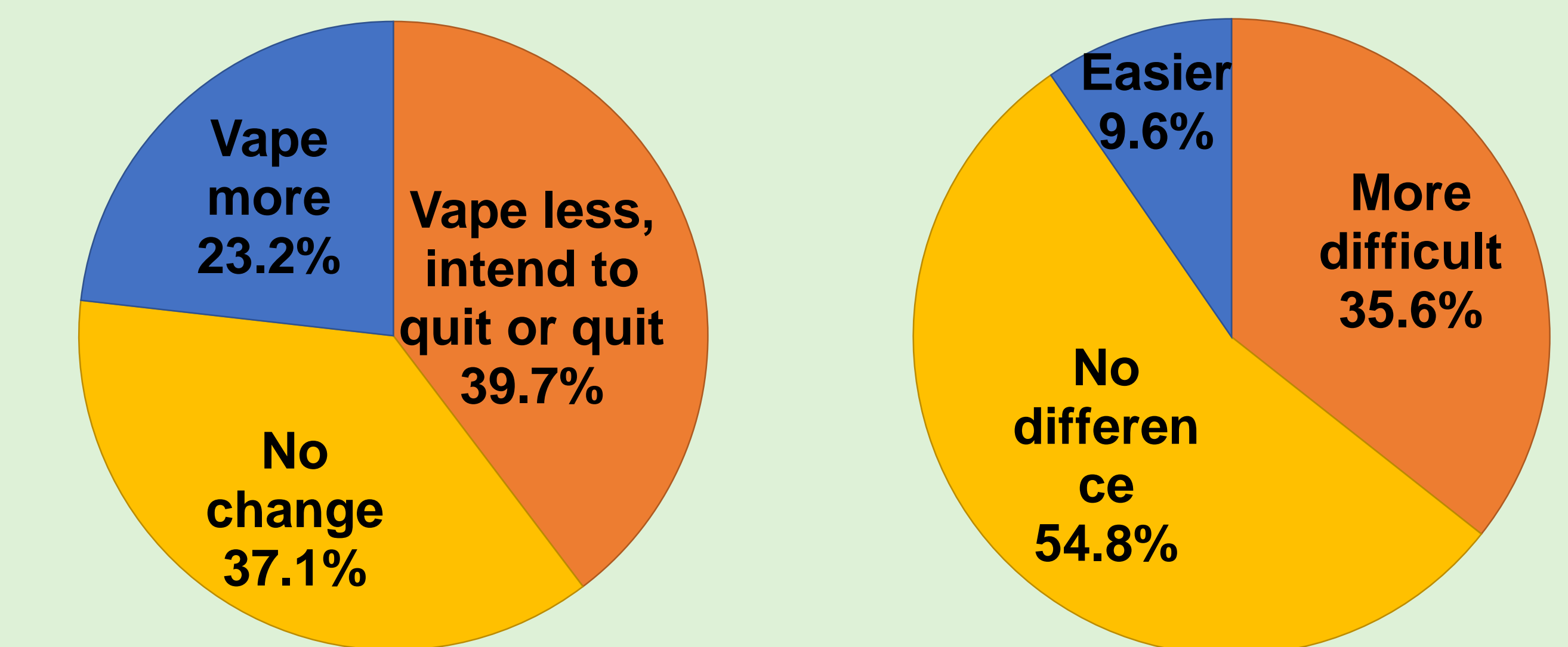
Figure 3: Any use of e-cigarette flavors among NYS youth, ITC 2020



* Indicates statistical significance with a p<0.05

RESULTS (cont'd)

Figure 4: Association of COVID-19 and NYS youth vaping behavior and access to vaping products, ITC Aug 2020



CONCLUSIONS

- Over a 6-month period in 2020, it appears that the youth vaping prevalence was significantly lower.
- Although the use of tobacco flavor, the only permitted flavor, was increasing, albeit insignificant, many continue to vape restricted flavors.
- COVID-19 may have some association with NYS youth vaping behavior and access to products.
- Currently, there is no other data source that provides data for NYS and e-cig flavor use following the e-cig flavor restriction.
- It is important to continue monitoring changes in user behaviors and perceptions, as well as compliance with the policy, as many continue to vape prohibited flavors.
- Data were collected only 3-months after the implementation of the flavor restriction, so we may be observing no change in use of non-tobacco flavors due to recall bias (e.g., remembering past 60-days vs. past 30-days), stock piling of flavored products in anticipation of the policy, and finally, consumers continuing to obtain flavored products elsewhere (e.g., vape shops).

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