

Public Health Concerns Related to Underage Use of Flavored Smoke-Free Tobacco Products

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The purpose of this presentation is to advance scientific discourse regarding progress in tobacco harm reduction, which includes prevention of underage tobacco use.

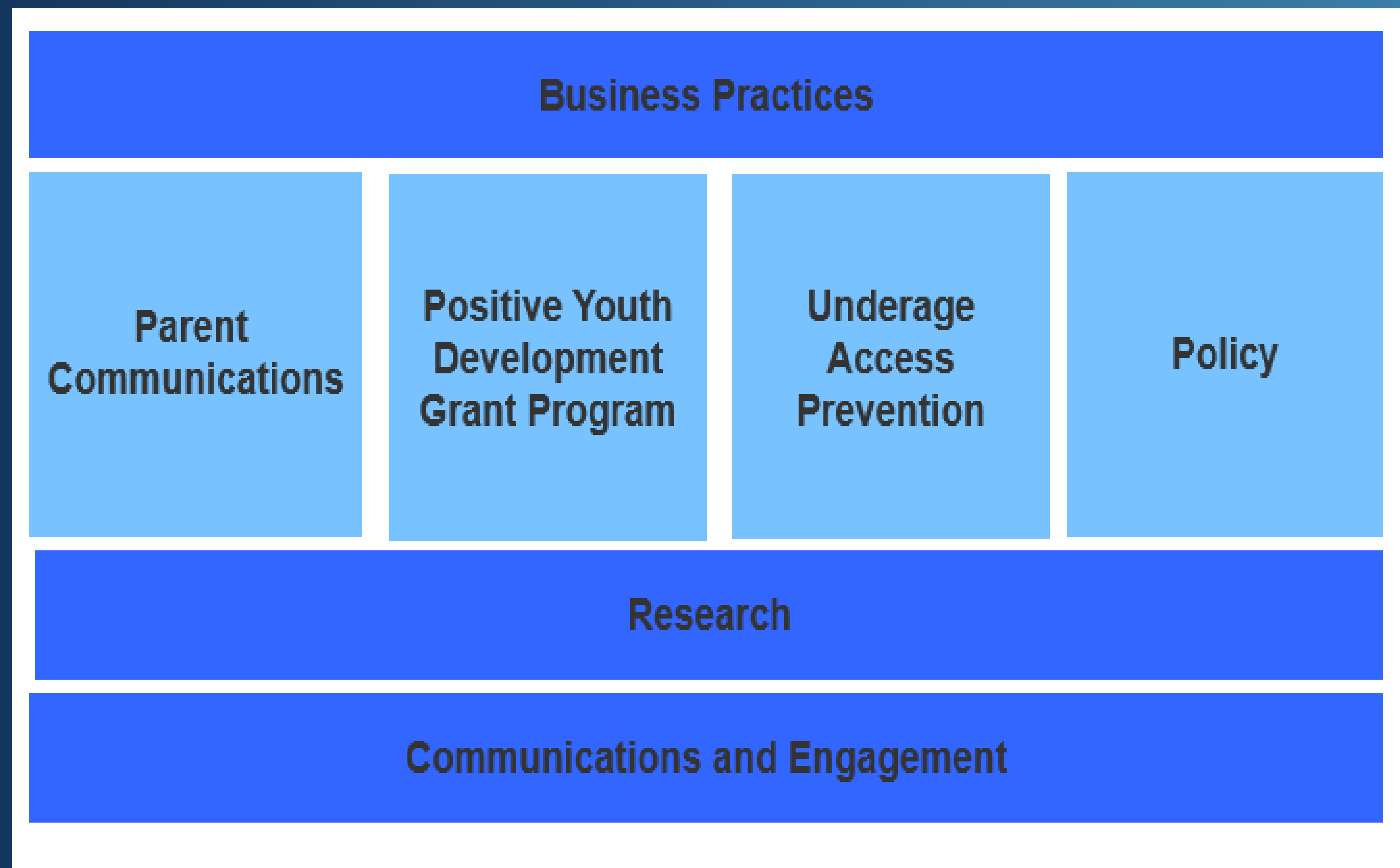


No Level of Underage Initiation or Use of Tobacco Products, Including Smoke-Free Products, is Acceptable.

Altria's Approach to Underage Prevention

Lead the industry in preventing underage use of products intended for adults 21 and over while contributing to the healthy development of youth ages 12-18.

Underage Use Prevention Framework



Key Questions Related to Underage Use of Flavored Smoke-Free Tobacco

- What are the main concerns regarding flavored smoke-free tobacco products and underage use?
- What does the current underage tobacco use landscape look like and how has it changed over time?
- What types of flavored smoke-free products do underage individuals report using and how does this compare to legal age adult use?
- What role do flavors play in underage use of smoke-free products?
- How do underage individuals typically access smoke-free products?
- What interventions and strategies can, and have worked, to reduce underage use of tobacco products, including flavored smoke-free products?
- Discussion Question: Is it possible to preserve smoke-free flavor options, which present a harm reduction opportunity for legal age adults, while preventing underage use?

Public Health Concerns Regarding Youth Use of Flavored Smoke-Free Products

In its 2018 Advanced Notice of Proposed Rule Making, FDA states: “...flavors in tobacco products increase the appeal of those tobacco products to youth, and promote youth initiation”¹

Proportion of Youth New Tobacco Initiates Reporting First Tobacco Product Used Was Flavored: PATH Wave 4²

Tobacco Category	New Initiates* (n) 12-17 years	Proportion Reporting First Use was Flavored
Cigarettes	n=767	24%
E-cigarettes	n=987	96%
Cigarillos	n=233	57%
Smokeless Tobacco (without snus)	n=230	72%

A recent systematic review³ evaluating the role of flavors in youth uptake of e-cigarettes concluded:

- Flavors may play role in initiation and continuation of vaping
- No clear impact of e-cigarette flavors on combustible smoking initiation or cessation
- Quality of existing evidence is low

¹ 83 Fed. Reg. at 1,2295, emphasis added

² ALCS analysis of PATH Wave 4: *New initiators (baseline population): New baseline youth respondents who have ever smoked a cigarette, or continuing youth respondents who have initiated cigarette smoking since their last completed interview.; Response options include: Yes, No and I Don't Know; The e-cigarette proportion of “flavored” does not include new users whose first e-cigarette tried was tobacco flavored.

³ [Youth use of e-liquid flavours—a systematic review exploring patterns of use of e-liquid flavours and associations with continued vaping, tobacco smoking uptake or cessation - PMC \(nih.gov\)](#)



Article

Adolescents, Young Adults, and Adults Continue to Use E-Cigarette Devices and Flavors Two Years after FDA Discretionary Enforcement

Devin M. McCauley ¹ , Shivani Mathur Gaiha ¹, Lauren Kass Lempert ^{1,2} and Bonnie Halpern-Felsher ^{1,*}

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Adolescent Use of Flavored Non-Tobacco Oral Nicotine Products

Alyssa F. Harlow, PhD, ^{a,b} Erin A. Vogel, PhD, ^{a,b} Alayna P. Tackett, PhD, ^{a,b,c} Junhan Cho, PhD, ^{a,b,c} Dae-Hee Han, PhD, ^{a,b} Melissa Wong, MS, ^{a,b} Myles G. Cockburn, PhD, ^{a,b,c,d} Steve Y. Sussman, PhD, ^{a,b,c} Jennifer B. Unger, PhD, ^{a,b,c} Adam M. Leventhal, PhD, ^{a,b,c} Jessica L. Barrington-Trimis, PhD ^{a,b,c}

National

New 'Candy' E-cigs Catch Fire After U.S. Regulators Stamp Out Juul's Flavors

By Chris Kirkham, Arriana McLymore and Gigi Zamora
08/16/22 AT 6:48 AM



EYEWITNESS NEWS
abc7NY WABC-TV

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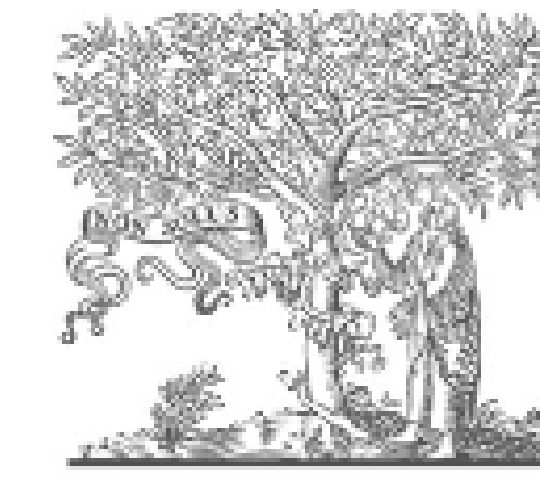
Health & Fitness

FDA issues warning about illegal flavored nicotine gummies

PHYSICIAN'S WEEKLY

Flavored Nontobacco Oral Nicotine Products Widely Used by Teens

Aug 13, 2022



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Contents lists available at ScienceDirect

Addictive Behaviors

journal homepage: www.elsevier.com/locate/addictbeh



E-cigarette devices, brands, and flavors attract youth: Informing FDA's policies and priorities to close critical gaps

Shivani Mathur Gaiha ^a, Lauren Kass Lempert ^{a,b}, Karma McKelvey ^a, Bonnie Halpern-Felsher ^{a,*}

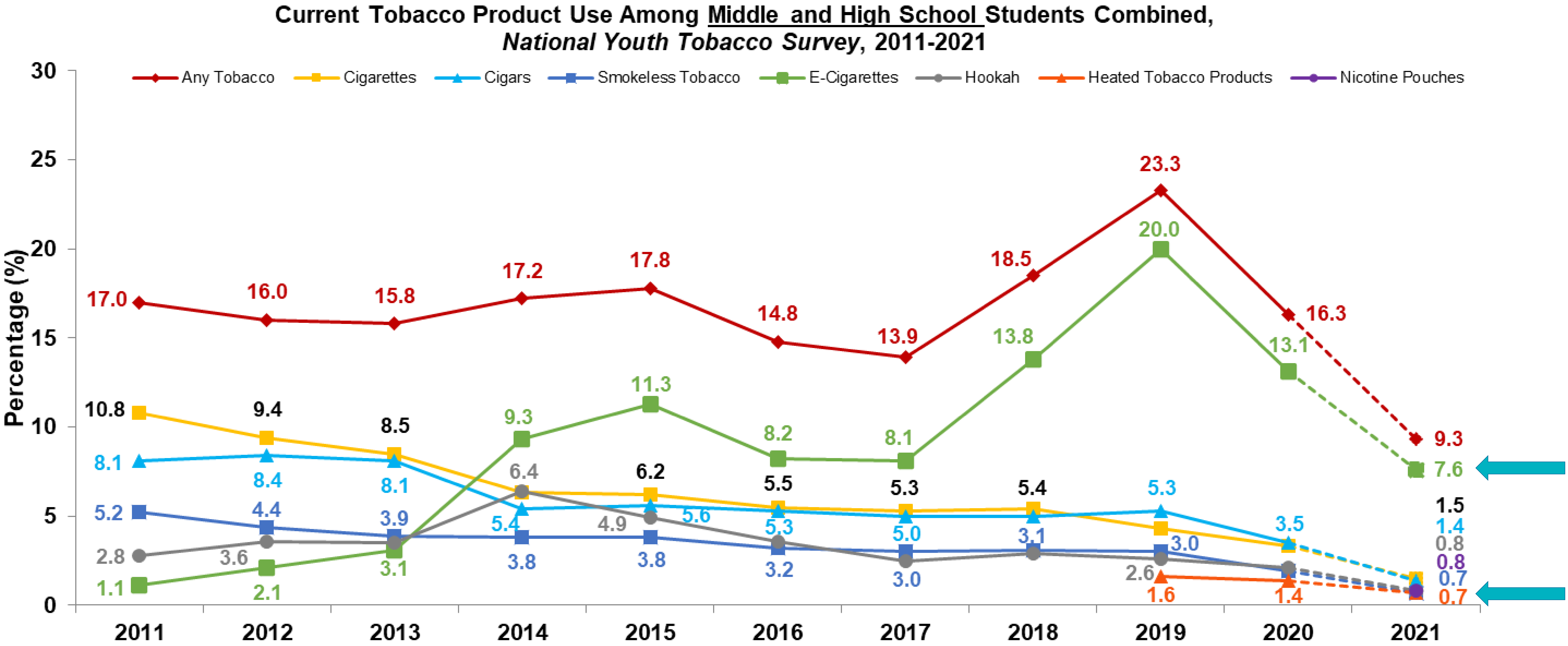
Study Finds Flavor Bans Failed to Reduce Youth Vaping

FLAVORS August 29, 2022



Altria
Science

Youth Use of Traditional Tobacco Products Has Declined Over Time

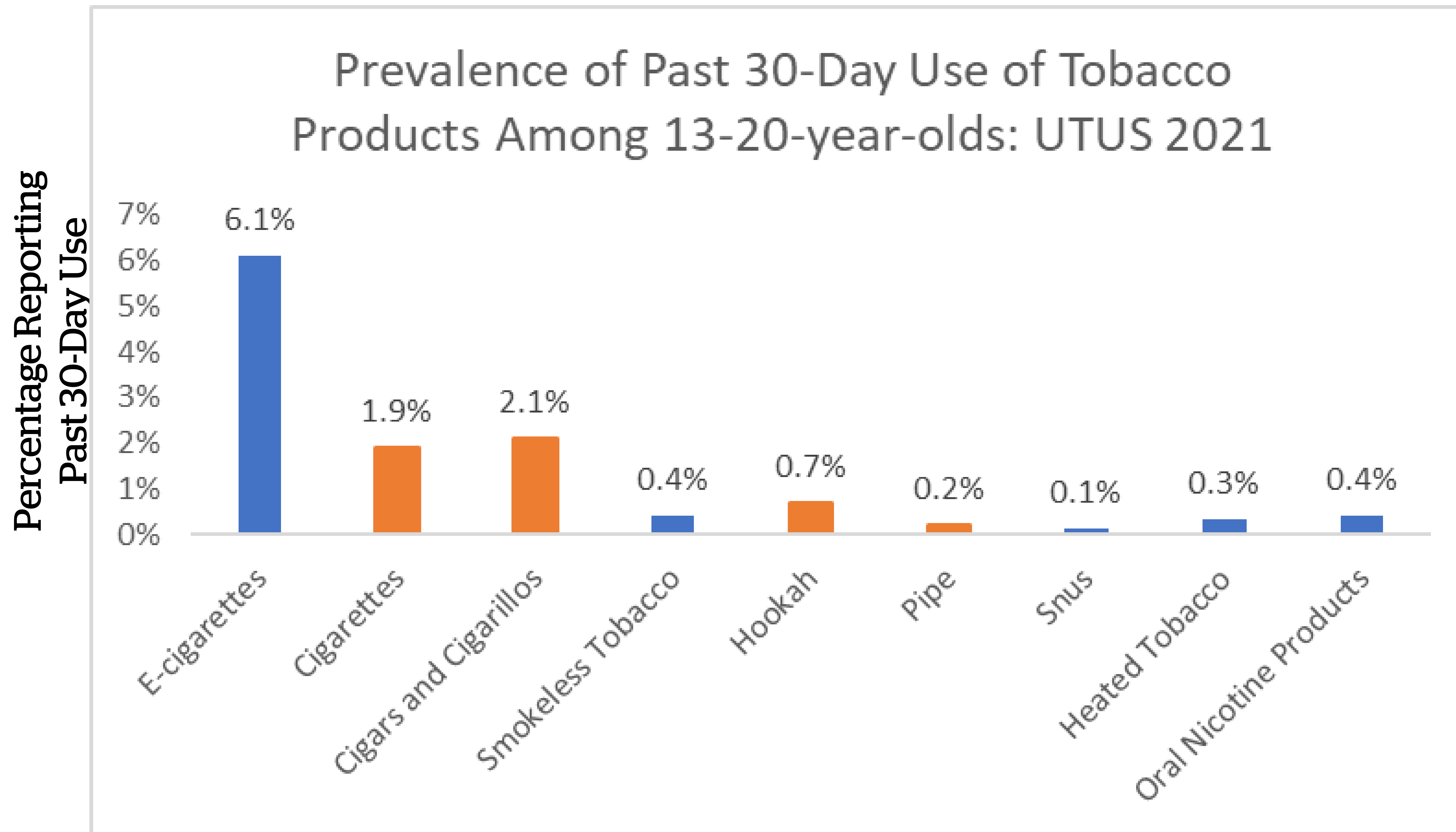


Sources: **ALCS analysis of NYTS 2011-2021.**

Note: Any tobacco use is past 30-day use of any of tobacco products surveyed each year on ≥ 1 day in the past 30 days.

Note: in 2014 and 2015, modifications were made to the e-cigarette measure to enhance its accuracy, which may limit the comparability of these estimates to those collected in previous years. In 2019, modifications were made to the survey, as well as the e-cigarette measure through inclusion of a brand example (JUUL); authors caution against comparisons to prior years. For smokeless tobacco, 2015 and prior years data are not comparable due to methodological changes into 2015. In 2015 smokeless tobacco includes chewing tobacco/snuff/dip, snus, and dissolvable tobacco because of limited sample sizes. Prior to 2015, smokeless tobacco included only chewing tobacco/snuff/dip. In 2021, the survey was conducted online during the COVID-19 pandemic with an overall lower participation rate than during previous years. Due to differences in data collection procedures, the results from 2021 NYTS cannot be compared to previous years that were primarily conducted on school campuses. Dashed lines from 2020-2021 represent these differences

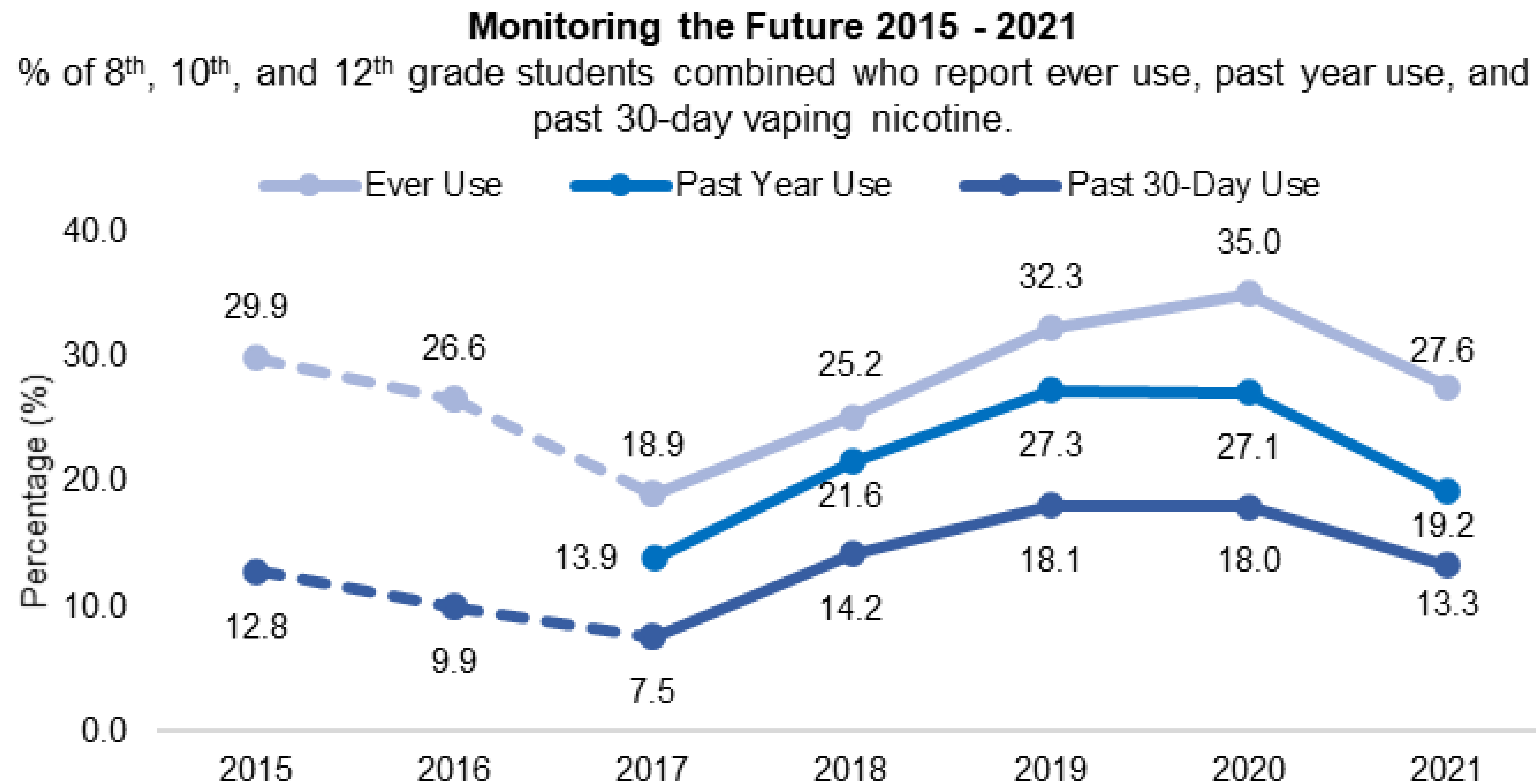
E-Cigarettes are the Most Common Form of Underage Tobacco Use While Prevalence of Use of Other Smoke-Free Products is Low



Scan for more info about
Altria's Underage
Tobacco Use Survey

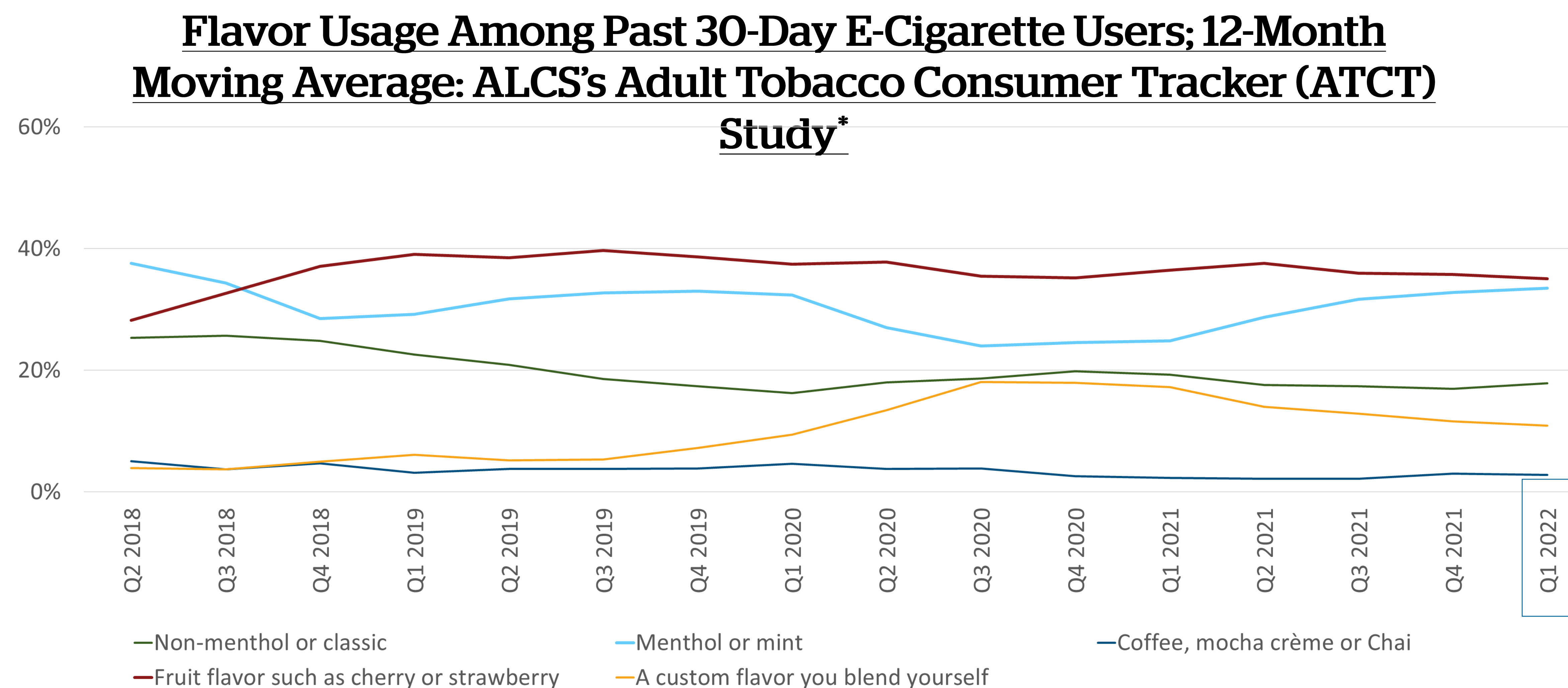
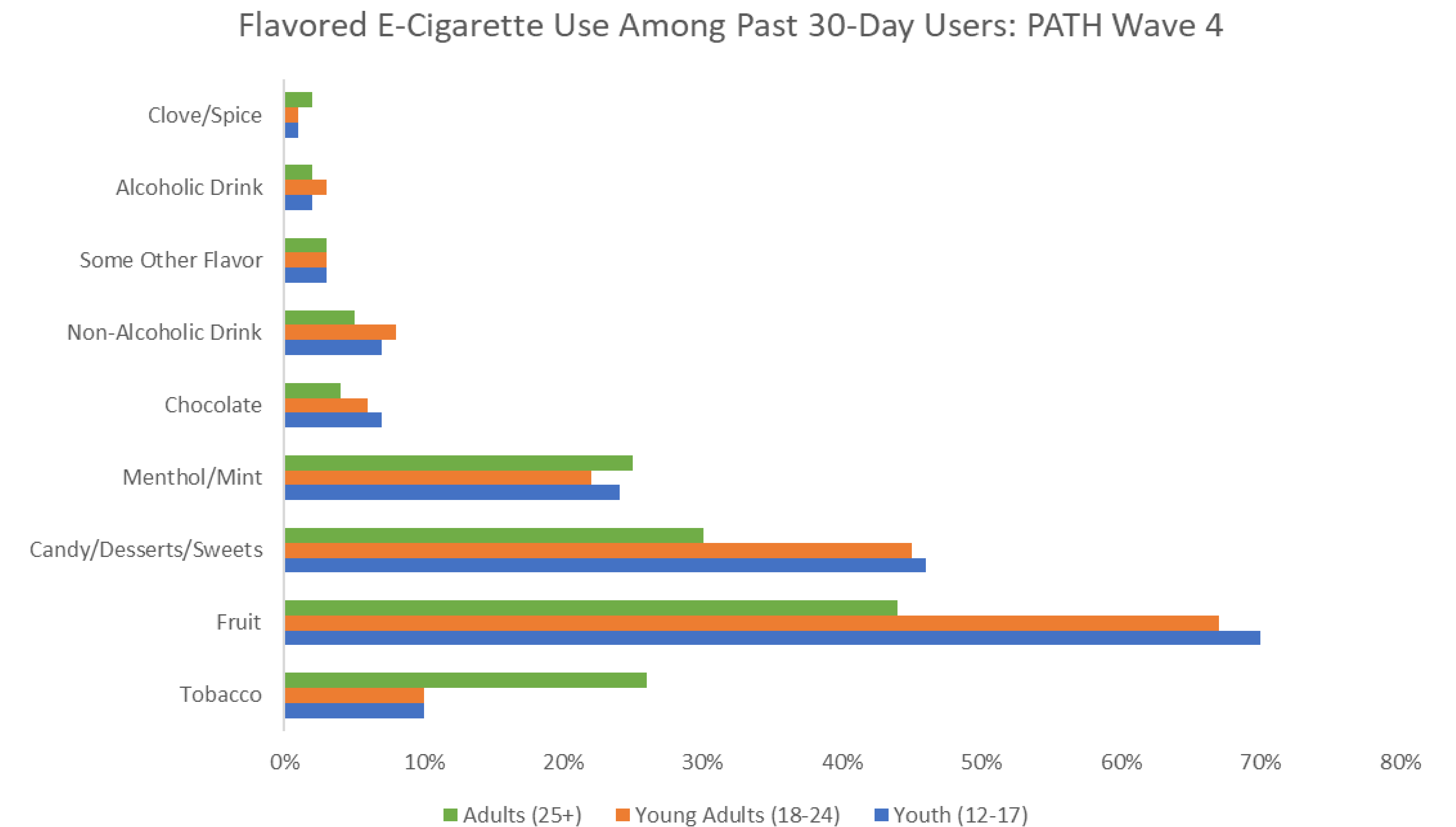
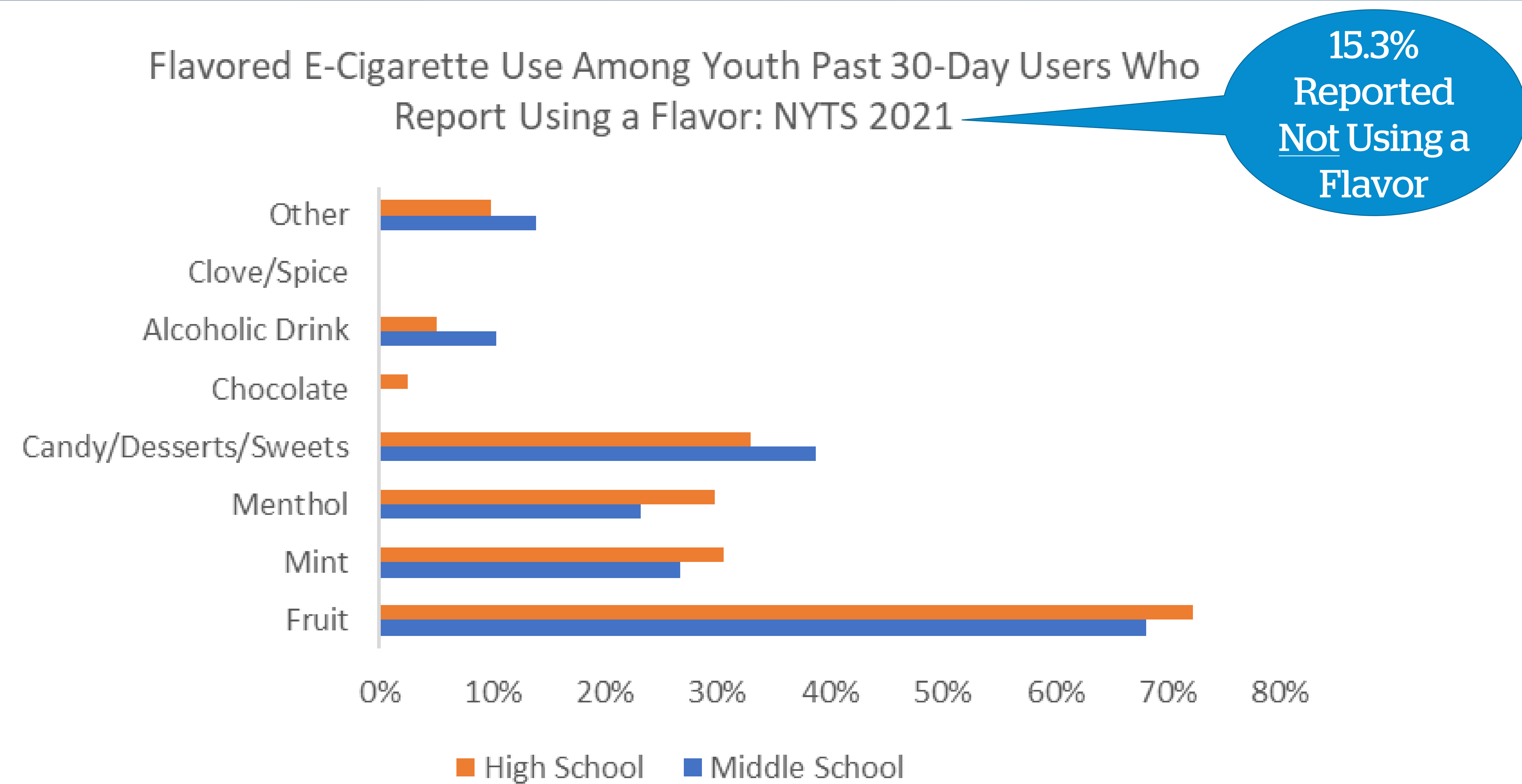


While Recent Evidence Suggests a Flattening or Decline in Underage E-Cigarette Use, Rates Remain High



Source: ALCS Analysis of Monitoring the Future Data 2015-2021; 2015-2016 and 2017-2021 are not directly comparable to prior years due to methodological changes. Vaping in 2017-2021 includes those who reporting vaping nicotine. In 2020, the total sample size only represents a quarter of the typical annual sample size due to the COVID-19 pandemic. Data were gathered from a broad geographic and representative sample and statistically weighted to provide national numbers

Use of Flavored E-Cigarettes is Common Among Current Users: Fruits, Mint/Menthol, and Sweet Flavors Among Top Reported



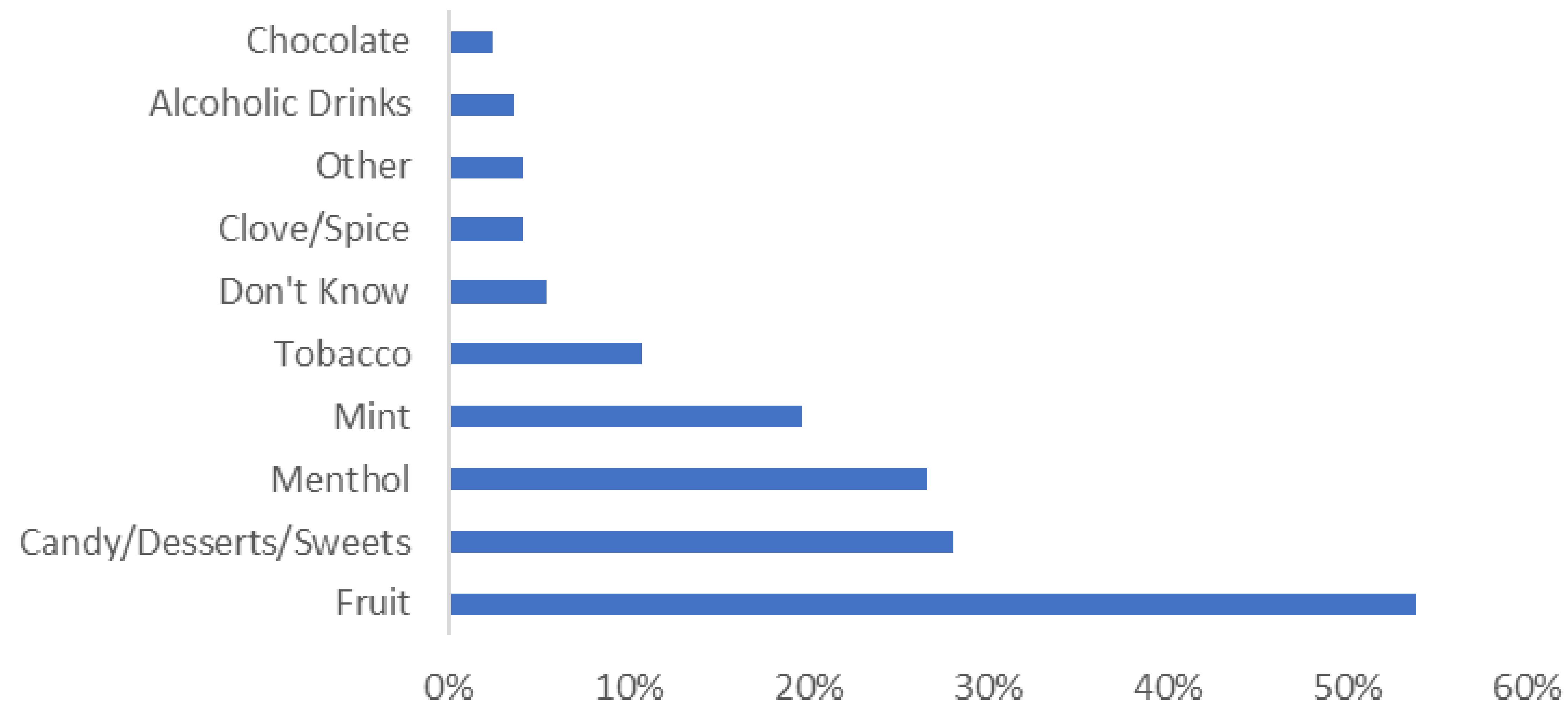
Q1 2022
 Fruits: 35.0%
 Mint/Menthol: 33.5%
 Classic/Tobacco: 17.9%
 Custom Blend: 10.8%
 Coffee/Cream: 2.8%

*Altria Client Services LLC's (ALCS) Adult Tobacco Consumer Tracker (ATCT) is a nationally representative, mixed-mode tracking survey designed to measure tobacco use prevalence and transition behavior by category and segment among civilian, noninstitutionalized adults in the U.S. The ATCT has been in continuous operation since July 2013. Respondents must be 21 years of age or older to participate. Before July 2019, the participation requirement was legal age or older. ATCT collects data on 2,400 respondents monthly.

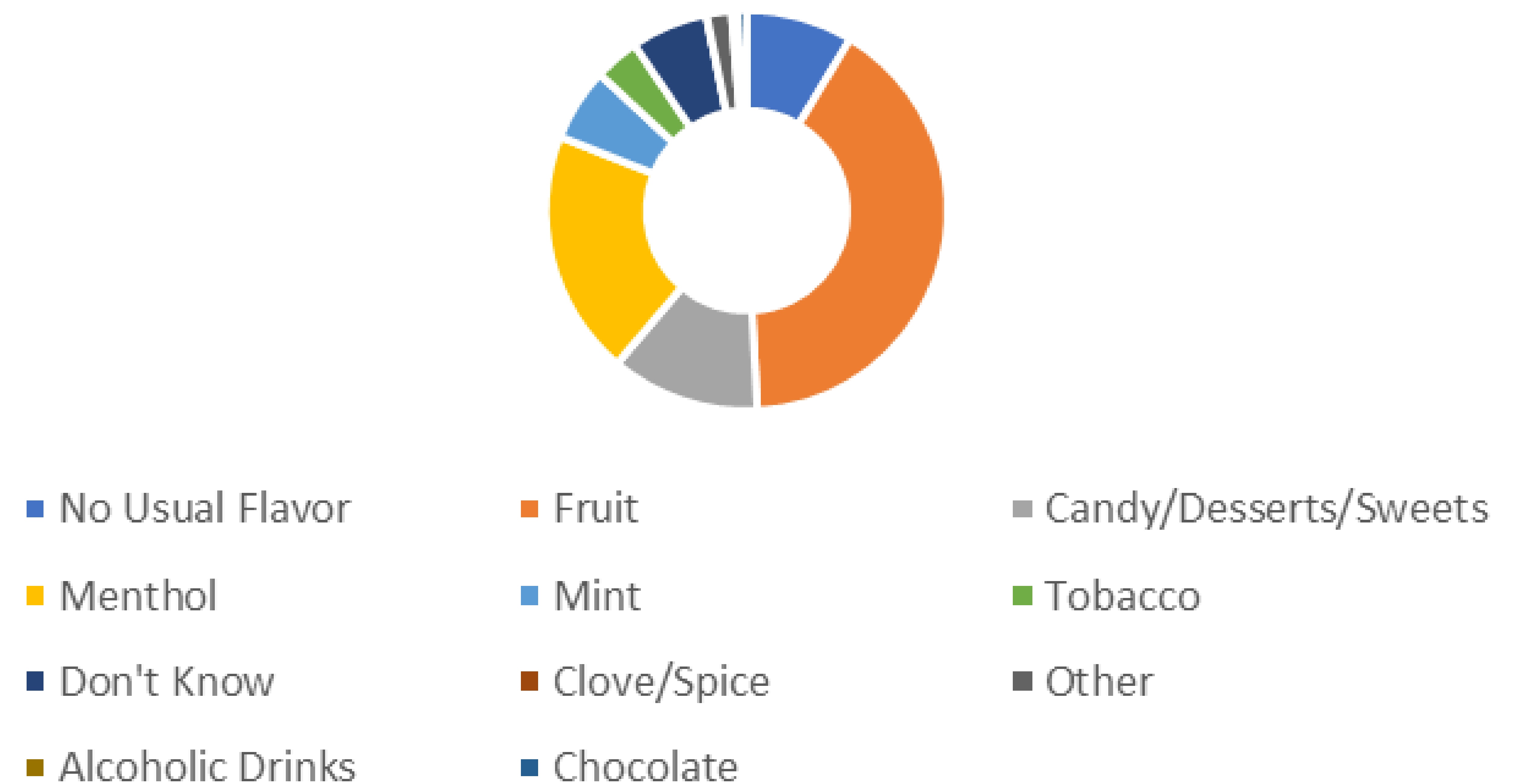
Underage Current E-Cigarette Users Often Report Use of Multiple Flavors

Results of ALCS's Underage Tobacco Use Survey 2021

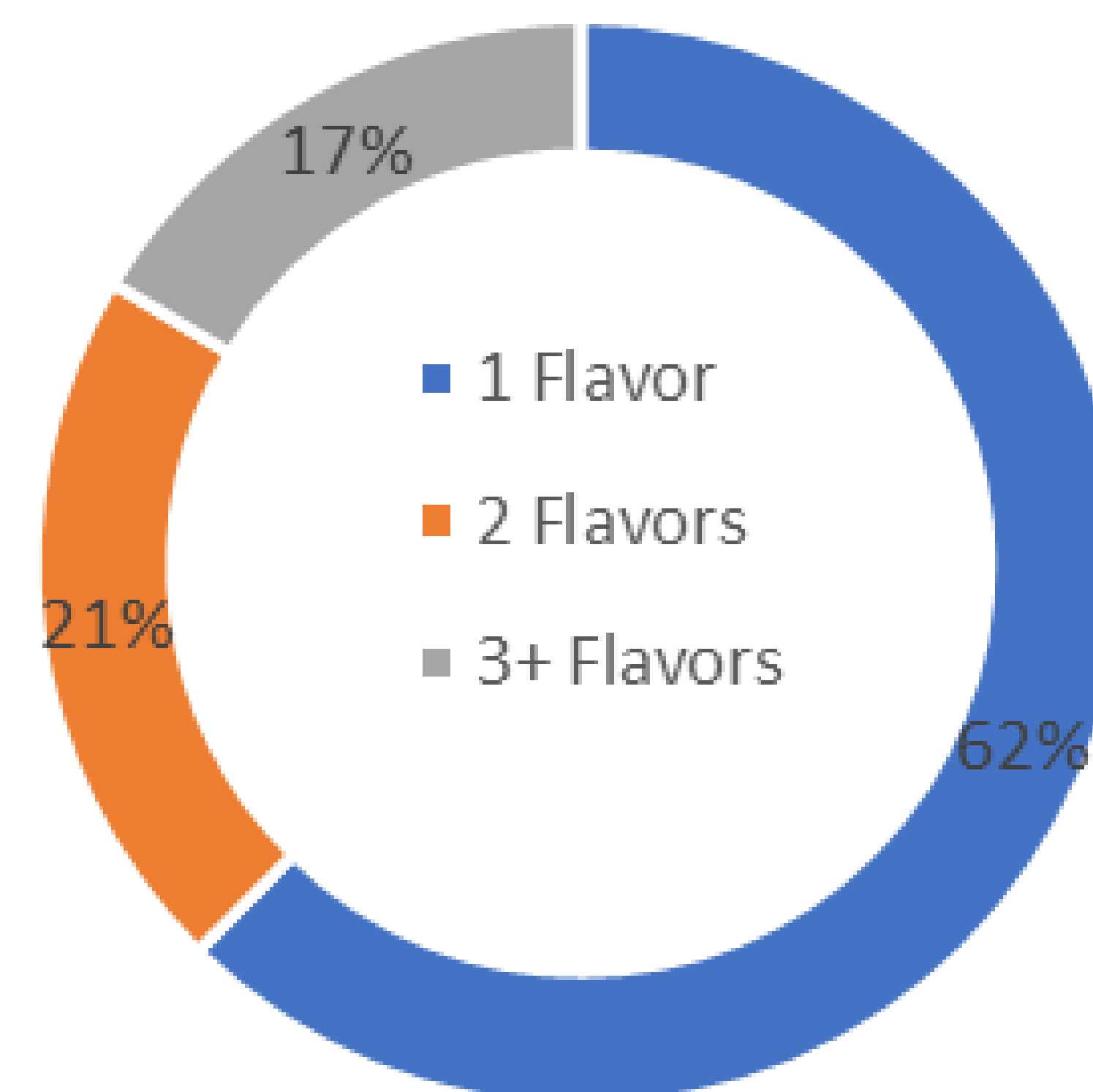
All Flavors Used Among Past 30-Day Underage E-Cigarette Users (13-20 years old)



Usual Flavor Used Among Past 30-Day Underage E-Cigarette Users (13-20 years old)



Number of Flavors Used by Past 30-Day E-Cigarette Users (13-20 years old)



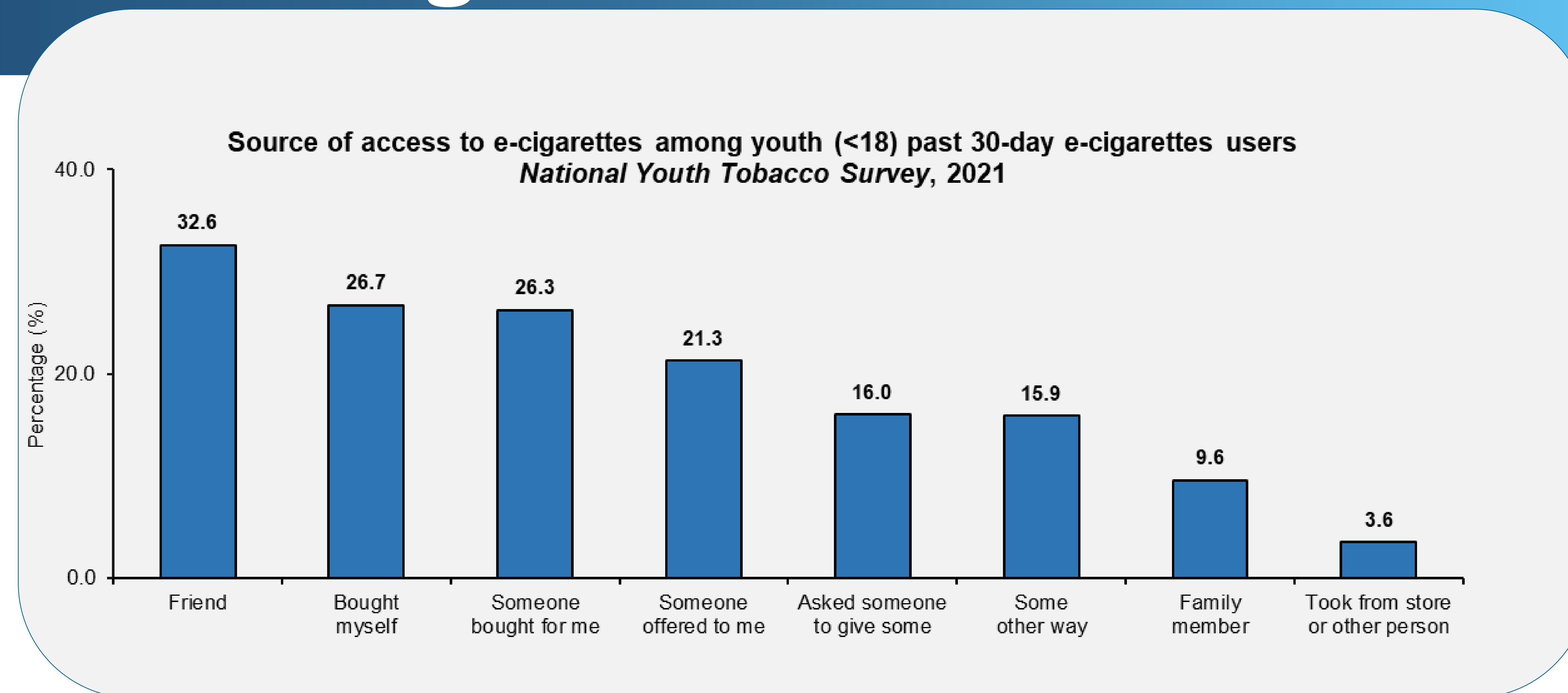
Youth Cite Various Reasons for First Trying and Currently Using E-Cigarettes

Reason for first use, NYTS 2021*	High School	Middle School
A friend [used/uses] them	60.6	42.6
I [was/am] curious about them	47.2	49.4
To get a high or buzz from nicotine	24.9	14.5
I [was/am] feeling anxious, stressed, or depressed	24.5	28.1
I [could/can] use them to do tricks	16.4	16.3
A family member [used/uses] them	16.0	32.0
They [were/are] available in flavors, such as menthol, mint, candy, fruit, or chocolate	13.2	14.2
I [could/can] use them unnoticed at home or at school	11.2	8.3
Some other reason	9.0	18.4
They are less harmful than other forms of tobacco, such as cigarettes	8.3	7.7
They [were/are] easier to get than other tobacco products, such as cigarettes	4.5	6.0
I've seen people on TV, online, or in movies use them	4.4	4.9
To try to quit using other tobacco products, such as cigarettes	2.3	-
They cost less than other tobacco products, such as cigarettes	1.9	-

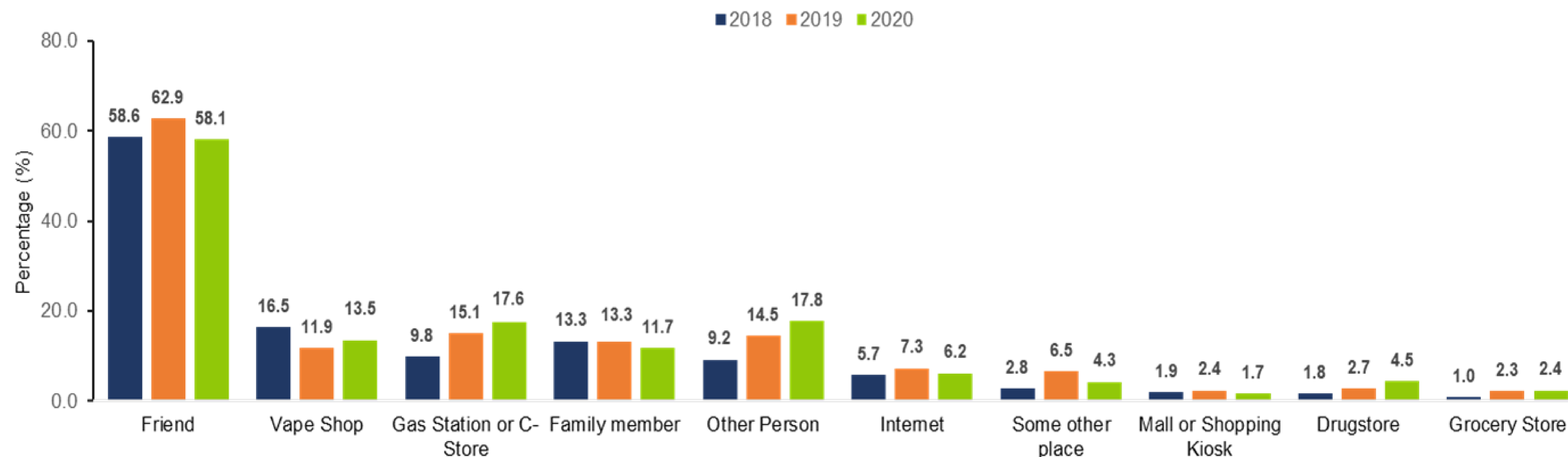
Reason for current use, NYTS 2021*	High School	Middle School
To get a high or buzz from nicotine	45.3	29.2
I [was/am] feeling anxious, stressed, or depressed	43.2	45.0
A friend [used/uses] them	27.6	31.7
I [could/can] use them to do tricks	19.5	22.2
Some other reason	19.0	22.0
I [could/can] use them unnoticed at home or at school	13.9	8.1
They [were/are] available in flavors, such as menthol, mint, candy, fruit, or chocolate	13.2	12.1
They are less harmful than other forms of tobacco, such as cigarettes	10.3	10.0
I [was/am] curious about them	9.0	17.8
A family member [used/uses] them	6.3	21.0
They [were/are] easier to get than other tobacco products, such as cigarettes	5.5	7.8
They cost less than other tobacco products, such as cigarettes	4.1	7.5
To try to quit using other tobacco products, such as cigarettes	4.1	6.0
I've seen people on TV, online, or in movies use them	2.5	-

*Adapted from Table 6 in [Tobacco Product Use and Associated Factors Among Middle and High School Students — United States, 2021](#); Bold font indicates top 5 reasons for first OR current use of e-cigarette; reasons for first use asked among ever triers of e-cigarettes; reasons for current use asked only among current users; overall estimates for 2021 were reported among 20,413 U.S. middle and high school students

Youth Typically Access E-Cigarettes Through Social Sources



Source of Access to E-cigarettes Among Past 30-day E-cigarette Users
Under 18 in High School and Middle School
Data from NYTS 2018 - 2020, percentages shown



Multiple Strategies and Stakeholders Work to Prevent Underage Tobacco Use

- Tobacco 21 laws work to keep tobacco products, such as cigarettes and e-cigarettes, out of the hands of youth by limiting social sources.¹
- Compliance and enforcement of age restriction laws are pivotal to preventing underage use and can be enhanced through retailer education and tech advances such as digital age verification technology.³
- Public education campaigns are effective at reducing underage tobacco use.²
- Positive youth development programs work to prevent adverse risk-taking behaviors.⁴
- Whether banning or restricting flavors in smoke-free products prevents or reduces underage tobacco use is still in question and remains a hotly debated topic.

¹ [Tobacco-21 Laws: Insights From the US Experience | Nicotine & Tobacco Research | Oxford Academic \(oup.com\)](#) and [Tobacco 21 laws may reduce smoking and tobacco-related health disparities among youth in the U.S. - PMC \(nih.gov\)](#)

² [Impact of The Real Cost Media Campaign on Youth Smoking Initiation - ScienceDirect](#) and [Associations Between Exposure to The Real Cost Campaign, Pro-Tobacco Advertisements, and Tobacco Use Among Youth in the U.S. - PMC \(nih.gov\)](#)

³ [Beyond Strong Enforcement: Understanding the Factors Related to Retailer Compliance With Tobacco 21 - PMC \(nih.gov\)](#)

⁴ [The effects of Positive Youth Development interventions on substance use, violence and inequalities: systematic review of theories of change, processes and outcomes - NCBI Bookshelf \(nih.gov\)](#)



Conclusions

- While flavors in smoke-free tobacco products offer appealing and satisfying reduced harm alternatives for adult (21+) tobacco consumers, concerns remain over appeal and use of these products among underage populations.
- E-cigarette use represents the most common form of tobacco use among underage populations.
- As seen with adults, use of flavored e-cigarettes is common among underage users, but flavors do not appear to be a primary reason for starting or continuing e-cigarette use among this population.
- A variety of efforts such as public education campaigns, positive youth development and prevention programs, enhanced age verification at retail, and raising the minimum legal age to purchase tobacco have likely contributed to prevention of underage use of tobacco products.
- These prevention efforts are the key to addressing underage use of tobacco products while preserving flavored smoke-free alternatives for adult (21+) tobacco consumers.



Thank You!!!

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