



FLAVORED TOBACCO PRODUCTS ATTRACT KIDS

Cigarettes with specific characterizing flavors were prohibited in the U.S. on September 22, 2009, as part of the Family Smoking Prevention and Tobacco Control Act (TCA) that gave the U.S. Food and Drug Administration (FDA) authority over tobacco products.¹ However, before that, tobacco companies marketed cigarettes with flavors, images, and names that appealed to a young audience. Despite the FDA's ban on flavored cigarettes, the overall market for flavored tobacco products is growing. Continuing a long tradition of designing products that appeal explicitly to new users, tobacco companies in recent years have significantly stepped up the introduction and marketing of flavored other tobacco products (OTPs), particularly e-cigarettes and cigars, as well as smokeless tobacco and hookah. With their colorful packaging and sweet flavors, today's flavored tobacco products are often hard to distinguish from the candy displays near which they are frequently placed in retail outlets. Although tobacco companies claim to be responding to adult tobacco users' demand for variety, flavored tobacco products play a key role in enticing new users, particularly kids, to a lifetime of addiction. This growing market for flavored tobacco products is undermining the nation's overall progress in reducing youth tobacco use.

Flavored Tobacco Products are on the Rise

Tobacco companies market products in many kid-friendly flavors such as gummy bear, berry blend, chocolate, peach, cotton candy, strawberry, and grape, and more seem inevitable. "Candy-flavored" is, in fact, an appropriate way to describe these products since a recent chemical analysis has shown that the same flavor chemicals used in sweet-flavored cigars of various sizes and smokeless tobacco products are also used in popular candy and drink products such as LifeSavers, Jolly Ranchers, and Kool-Aid.² A 2013 survey of internet tobacco retailers found that more than 40% of cigarette-sized cigars, machine-made cigars, moist snuff, and dry snuff tobacco products were flavored, including fruit, sweet, and mint/menthol.³ An article in *Convenience Store News* stated, "flavored tobacco is offering a bright spot in the category," referring to the increased tobacco sales – and number of consumers – in stores that sell such products.⁴

Cigars. Historically, cigar manufacturers designed flavored cigars to serve as "starter" smokes for youth and young adults because the flavors helped mask the harshness, making the products easier to smoke.⁵ Recently, there has been an explosion of cheap, flavored cigars. Sales of cigars (i.e., large cigars, cigarillos, and small cigars) have more than doubled between 2000 and 2020, from 6.2 billion cigars to 13.2 billion cigars, and sales have been generally increasing at a time when cigarette smoking has been declining.⁶

Much of the growth in cigar sales is attributable to smaller types of cigars, many of them flavored. An industry publication stated, "While different cigars target a variety of markets, all flavored tobacco products tend to appeal primarily to younger consumers."⁷ These products are often colorfully packaged and much cheaper than cigarettes; for instance, cigarillos can be priced as low as 3 or 4 for 99 cents, making them even more appealing to price-sensitive youth.

- There has been an explosive growth in flavor options for cigars, such as candy, fruit, chocolate, and various other kid-attracting tastes. The vice president of one distributor commented, "For a while it felt as if we were operating a Baskin-Robbins ice cream store" in reference to the huge variety of cigar flavors available – and, no doubt, an allusion to flavors that would appeal to kids.⁸
- Flavored cigars have made a substantial contribution to the overall growth of the cigar market. Nielsen convenience store market scanner data show that the share of flavored cigars rose from 45% in 2009 to 53.3% in 2020. Among flavored cigars sold in these stores in 2020, the most popular flavors were sweet or candy (30.6%), fruit (29.5%), concept (21.4%), and wine (9.0%). Fruit-flavored cigar sales declined during 2009 to 2020, while sales of sweet/candy flavored cigars and concept-flavored cigars increased.⁹ Earlier data show that sales of flavored cigars in convenience stores

increased by nearly 50% between 2008 and 2015, with the number of unique cigar flavor names more than doubling from 108 to 250.¹⁰

- Data from all Nielsen-tracked channels* show that 47.5% of all cigars sold in the first half of 2020 were flavored. During that same period, 48.3% of cigarillos (which made up 94.2% of overall cigar sales) sold were flavored; 48.5% of little cigars sold were flavored; and 15.8% of large cigars sold were flavored.¹¹
- The top five most popular cigar brands among 12- to 17-year olds who have used cigars – Swisher Sweets, Black & Mild, Backwoods, White Owl, and Dutch Masters – all come in flavor varieties.¹² For example, Black & Mild cigars come in flavors such as apple and cherry; Swisher Sweets comes in a huge variety of flavors such as tropical fusion, Maui pineapple, twisted berry, cherry dynamite and banana smash; and White Owl has flavors such as mango, tropical twist, strawberry kiwi and peach. Altria, the nation’s largest tobacco manufacturer and parent company of Philip Morris USA, expanded its business to the cigar category in 2007 by acquiring John Middleton, Inc., which sells Black & Mild.
- Nielsen convenience store market scanner data also show an increasing number of products with names that do not explicitly identify a flavor, such as Swisher’s “Wild Rush” and Altria’s “Jazz,” even though they are flavored. From 2012 to 2016, the proportion of all cigar sales comprised by these products (which researchers call “concept flavors”) increased from 9% to 15%. The increase was greatest among cigarillos, among which the number of unique concept flavors more than doubled, from 17 to 46.¹³ This strategy could be an attempt by cigar manufacturers to circumvent or complicate enforcement of local sales restrictions on characterizing flavors, some of which rely on definitions that describe flavors.

Since the Tobacco Control Act prohibited flavored cigarettes in 2009, cigarette makers have manipulated their products to qualify as “little” or “filtered” cigars.¹⁴ For instance, the 2012 Surgeon General’s report, *Preventing Tobacco Use Among Youth and Young Adults*, noted that flavored cigarettes such as Sweet Dreams re-emerged as Sweet Dreams flavored cigars after the federal restriction on flavored cigarettes went into effect.¹⁵ In October 2009, U.S. Representatives Henry Waxman and Bart Stupak sent letters to two flavored cigarette companies, Cheyenne International and Kretek International, that began making little cigars shortly after the federal flavored cigarette ban went into effect.¹⁶ Rep. Waxman discovered that Kretek International intentionally changed their cigarettes to cigars to exploit a loophole in the TCA.¹⁷ In December 2016, the FDA issued warning letters to four tobacco manufacturers – Swisher International, Inc., Cheyenne International LLC, Prime Time International Co. and Southern Cross Tobacco Company Inc. – for marketing and selling fruit-flavored cigarettes labeled as cigars, in violation of the 2009 Tobacco Control Act.¹⁸

Electronic Cigarettes. The variety of flavors available for use in e-cigarettes has grown exponentially. As of 2017, researchers had identified more than 15,500 unique e-cigarette flavors available online.¹⁹ E-cigarette marketing employs many of the same strategies used for years by cigarette manufacturers that proved so effective in reaching kids, such as celebrity endorsements, slick TV and magazine advertisements, and sports and music sponsorships. Another strategy has been the widespread marketing of e-cigarettes and nicotine “e-juice” with a wild assortment of candy, fruit and other flavors. Flavors are not just a critical part of the product design, but are a key marketing ploy for the industry. The 2016 Surgeon General Report on e-cigarettes concluded that, **“E-cigarettes are marketed by promoting flavors and using a wide variety of media channels and approaches that have been used in the past for marketing conventional tobacco products to youth and young adults.”**²⁰

In February 2020, FDA restricted some flavors in cartridge-based e-cigarettes, but exempted menthol-flavored e-cigarettes and left flavored e-liquids and disposable e-cigarettes widely available in every imaginable flavor. Since then, sales of flavored e-cigarettes have continued to grow, increasing by 57.8% from February 2020 to March 2023.²¹ This growth has been driven by increases in the sale of menthol e-cigarettes and flavored disposable e-cigarettes:

- From February 2, 2020, to March 26, 2023, disposable e-cigarette sales in tracked retail channels increased by 196.2% (4.0 million units to 11.9 million units). During this period, the market share of disposable devices increased from 25.8% to 53.4% of total e-cigarette sales. The popularity of

* Convenience stores, gas stations, grocery stores, drugstores/pharmacies, mass merchandiser outlets, club stores, dollar stores, and military sales. Excludes Internet sales and sales from tobacco specialty stores.

disposables has been driven primarily by candy and fruit flavors. As of March 2023, 80% of disposable sales were of flavors other than tobacco, mint and menthol.²²

- From February 2, 2020, to March 26, 2023, overall menthol flavored e-cigarette sales increased by 31.7% (5.2 million units to 6.8 million units), including a 32.4% increase in menthol-flavored cartridge sales (4.8 million units to 6.4 million units). As of March 26, 2023, menthol-flavored e-cigarette sales accounted for 30.4% of the overall e-cigarette market and 61.1% of the prefilled cartridge market.²³

The use of flavors in e-cigarette products is of even greater concern because e-cigarettes are the subject of extensive advertising campaigns, and there is evidence that young people are exposed to significant amounts of e-cigarette advertising. The 2021 National Youth Tobacco Survey found that 70.3% of middle and high school students—17.77 million youth—had been exposed to e-cigarette advertisements from at least one source.²⁴

Smokeless Tobacco. The variety of flavored smokeless tobacco products has grown over time and continues to grow.

- U.S. Smokeless Tobacco Company (UST, owned by Philip Morris USA’s parent company, Altria) increased the number of its sub-brands—including flavored products—by 140% from 2000 to 2006 in order to “cast a wide net” and appeal to as many potential users as possible.²⁵ In 2011, more than 80% of Skoal smokeless tobacco sold in convenience stores was flavored; and more than one out of five (21.1%) were fruit-flavored.²⁶ Current Skoal flavors include kid-friendly peach, citrus, cherry, berry, and apple.
- Data submitted to the Federal Trade Commission (FTC) by the top five smokeless tobacco companies show that in 2020, more than half (54.2%) of smokeless tobacco product sales revenue were from menthol or mint-flavored (i.e., spearmint, wintergreen) products.²⁷
- Between 2011 and 2019, the portion of flavored moist snuff products grew such that these products accounted for two-thirds of moist snuff products sold in 2019. Mint-type flavors (e.g., wintergreen, mint, spearmint) are by far the most popular.²⁸
- In 2019, nearly 90% of snus products sold were flavored as wintergreen, spearmint, and mint. All newer non-tobacco nicotine pouches are flavored, with wintergreen/spearmint/mint making up nearly 80% of the market, followed by cinnamon, coffee, and fruit flavors.²⁹
- A trade publication for convenience stores quoted one retailer stating, “In the case of smokeless tobacco, you get a new flavor once every quarter.”³⁰

Hookah. Hookahs (water pipes) originate from Middle Eastern countries, but their use has rapidly increased in the U.S. The tobacco used in hookah often has flavorings or sweeteners added to enhance the taste and aroma. In the U.S., even more kid-friendly flavors are available, such as watermelon, tropical fruit, orange cream, caramel, chocolate, tutti frutti, vanilla and strawberry.³¹

Cigarettes. Menthol cigarettes, the only remaining flavored cigarette, maintain a significant market share. While overall cigarette sales have been declining, the proportion of smokers using *menthol* cigarettes has been increasing.³²

- Data from the FTC show that in 2021, menthol cigarettes comprised 37% of the market, the highest proportion on record since FTC began collecting this data in 1963.³³ Between 2009 and 2018, sales of non-menthol cigarettes have declined by 33.1% nationally while sales of menthol cigarettes have declined by only 8.2% during the same period. 91% of the decline in cigarette sales between 2009 and 2018 is attributable to nonmenthol cigarettes.³⁴
- Before cigarettes with specific characterizing flavors were prohibited by the Tobacco Control Act, R.J. Reynolds’ “Camel Exotic Blends” came in flavors such as Twista Lime, Kauai Kolada, Warm Winter Toffee and Winter Mocha Mint, among others. Bright, colorful and alluring ads for these cigarettes have appeared in magazines popular with kids, including *Rolling Stone*, *Cosmopolitan* and *Sports Illustrated*.
- Using data from the 1999-2013 Youth Tobacco Surveys, a 2017 study analyzed the impact of the 2009 ban on characterizing flavors in cigarettes on youth tobacco use. The researchers found that cigarette use declined significantly after the ban, whereas cigar and pipe tobacco use significantly

increased. Further, use of menthol cigarettes, the only remaining flavored cigarette, increased significantly after the ban.³⁵

Flavored Products Appeal to Youth and Young Adults

Research shows that flavored products – no matter what the tobacco product – appeal to youth and young adults. Data from the 2013-2014 Population Assessment of Tobacco and Health (PATH) study found that 80.8% of 12-17 year olds who had ever used a tobacco product initiated tobacco use with a flavored product and that for each tobacco product, at least two-thirds of youth reported using these products “because they come in flavors I like.”³⁶ According to the 2021 NYTS, 79.1% of middle and high school tobacco users report using flavored products.³⁷

Another national study found that 18.5% of young adult tobacco users (18-34 years old) currently use a flavored tobacco product, with younger age being a predictor of flavored tobacco product use. In fact, the study found that those aged 18-24 years old had an 89% increased odds of using a flavored tobacco product compared to those aged 25-34 years old.³⁸

According to the 2012 Surgeon General Report, “Much of the growing popularity of small cigars and smokeless tobacco is among younger adult consumers (aged <30 years) and appears to be linked to the marketing of flavored tobacco products that, like cigarettes, might be expected to be attractive to youth.”³⁹ The 2016 Surgeon General Report on e-cigarettes concluded that flavors are among the most commonly cited reasons for using e-cigarettes among youth and young adults.⁴⁰

Cigars. More than 800 kids under age 18 try cigar smoking for the first time every day.⁴¹ Research shows that flavored cigars are driving much of this usage. Cheap, sweet cigars can serve as an entry product for kids to a lifetime of smoking.

- Data from the 2021 NYTS show that 41.1% of high school cigar smokers use flavored cigars. Among current youth users of flavored cigars, the most popular flavor is fruit (65%).⁴²
- The 2018-2019 wave of PATH data found that 60.4 percent of 12-17 year olds who had ever tried cigars started with a flavored cigar.⁴³ In 2013-2014, 73.8% of youth cigar smokers reported that they smoked cigars “because they come in flavors I like.”⁴⁴
- National data suggest that flavored cigar products are driving cigar use among adults, particularly young adults. With few exceptions, use of flavored cigars among adult cigar smokers is highest among those groups with the highest overall cigar use rates, including young adults aged 18-24 (57.1%), income below \$20,000 (51.7%), and non-Hispanic others (62.4%).⁴⁵
- Data from the National Adult Tobacco Survey indicate that use of flavored cigars decreases with age. Flavored cigar use among cigar smokers was 57.1% among 18-24 year olds, 43.2% among 25-44 year olds, 28.9% among 45-64 year olds and 13.4% among those ages 65 and older.⁴⁶
- Youth and young adults prefer brands that come in a variety of flavors, and that preference declines significantly with age – in one study, 95% of 12-17 year old cigar smokers reported a usual brand that makes flavored cigars compared with 63% of cigar smokers aged 35 and older.⁴⁷

E-Cigarettes. Given the dramatic growth in the availability and marketing of e-cigarettes, it is no surprise that e-cigarettes have been the most commonly used tobacco product among youth since 2014. Youth e-cigarette use remains a serious public health concern, with over 2.5 million youth, including 14.1% of US high schoolers, reporting current e-cigarette use in 2022.⁴⁸

- The 2022 NYTS found that about 85% of youth e-cigarette users use flavored products. Among youth users of flavored e-cigarettes, the most commonly used flavor types were fruit (69.1%), candy/desserts/other sweets (38.3%), mint (29.4%) and menthol (26.6%).⁴⁹
- Data from the 2018-2019 wave of the PATH study found that 98.1% of 12-17 year-old e-cigarette users reported using flavored products.⁵⁰ Earlier data from the 2016-2017 wave of the PATH study it found that 70.3% say they use e-cigarettes “because they come in flavors I like.”⁵¹

- While fruit and mint flavors are now prohibited in cartridge-based e-cigarettes, disposable e-cigarettes come in a wide array of kid-friendly flavors, like cotton candy, strawberry, and mint, which have become increasingly popular among kids. In 2022, 55.3% of high school e-cigarette users reported using disposable e-cigarettes. Puff Bar, a disposable e-cigarette, was the most popular brand among youth in 2022, preferred by 14.5% of youth e-cigarette users.⁵² Among current youth users of flavored disposable e-cigarettes, the most used flavor types are fruit (75.2%) and candy, desserts, and other sweets (40.4%).⁵³
- The 2013-2014 National Adult Tobacco Survey found that use of flavored e-cigarettes was highest among young adults (ages 18-24), compared to those over age 25, and that flavored e-cigarettes were most popular among adults who were never cigarette smokers.⁵⁴
- A national phone survey found that youth (ages 13-17) were more likely to report interest in trying an e-cigarette offered by a friend if it were flavored like fruit, candy or menthol, compared to tobacco. This study also found that youth believed that fruit-flavored e-cigarettes were less harmful than tobacco-flavored e-cigarettes.⁵⁵
- Another study found that compared to college students, high school students were more likely to report experimenting with e-cigarettes because of appealing flavors (47% vs. 33%).⁵⁶

Smokeless Tobacco. As with cigarettes, characterizing flavors in other tobacco products (OTPs) mask the tobacco flavor, and can make the products appealing to youth. Smokeless (or spit) tobacco companies, particularly the U.S. Smokeless Tobacco Company (UST), have a long history of creating new products that appeal to kids and marketing them aggressively to children in order to “graduate” them to more potent smokeless tobacco varieties.⁵⁷

- The 2021 NYTS found that 72.1% of current high school smokeless tobacco users report using flavored products. Mint is the most commonly used flavor among youth who use flavored smokeless tobacco.⁵⁸
- The 2013-2014 PATH study found that 68.9% of 12-17 year olds who had ever used smokeless tobacco reported using flavored smokeless tobacco the first time they tried the product.⁵⁹

Hookah. Research shows that many youth and young adults perceive hookah to be safer than other combustible tobacco products.⁶⁰ However, according to the CDC, using a hookah to smoke tobacco poses serious health risks to smokers and others exposed to the smoke from the hookah.⁶¹ Because the flavors and the smoking technique create a more soothing (“smooth”) experience, hookah smokers can inhale more deeply and spend more time in a “hookah session,” which typically lasts for 40 to 45 minutes (three to four times longer than it takes to smoke a cigarette). While a typical cigarette requires about 20 puffs, an hour-long hookah session may involve 100 to 200 puffs⁶², potentially exposing the user to more smoke over a greater period of time than what occurs when smoking a regular cigarette.⁶³ The appeal of flavored hookah undoubtedly contributes to its popularity among youth and young adults.

- The 2021 NYTS found that 46.6% of current high school hookah users reported using a flavored product in the last month. Fruit is the most popular flavor among youth who currently use flavored hookah.⁶⁴
- The 2013-2014 PATH study found that 88.7% of 12-17 year olds who had ever smoked hookah used flavored hookah the first time they tried the product and more than three-quarters (78.9%) of youth hookah users reported that they use hookah “because they come in flavors I like.”⁶⁵

Cigarettes. As the only flavored cigarette left on the market, it is no surprise that menthol cigarettes are popular among youth. Menthol cools and numbs the throat, reducing the harshness of cigarette smoke, thereby making menthol cigarettes more appealing to youth who are initiating tobacco use.⁶⁶

- The 2021 NYTS found that 41.1% of high school smokers use menthol cigarettes.⁶⁷
- Half (50.1%) of youth who have ever tried smoking initiated with menthol-flavored cigarettes.⁶⁸

- The popularity of menthol flavored cigarettes is also evidenced by brand preference among youth. According to data from the 2016 National Survey on Drug Use and Health, about one in five (18.9%) smokers ages 12-17 prefers Newport cigarettes, a heavily marketed menthol cigarette brand. Preference for Newport is even higher among African-American youth smokers (70.9%) because of targeted marketing by the tobacco industry.⁶⁹

According to FDA's Tobacco Product Scientific Advisory Committee (TPSAC):⁷⁰

- Menthol cigarettes increase the number of children who experiment with cigarettes and the number of children who become regular smokers, increasing overall youth smoking.
- Young people who initiate using menthol cigarettes are more likely to become addicted and become long-term daily smokers.
- The availability of menthol cigarettes reduces smoking cessation, especially among African-Americans, and increases the overall prevalence of smoking among African Americans.

FDA's own scientific analysis concluded that menthol cigarettes lead to increased smoking initiation among youth and young adults, greater addiction and decreased success in quitting smoking.⁷¹ Although they are no longer on the market, older studies on flavored cigarettes other than menthol are still relevant to reinforce the general appeal of flavors to youth and young adults. When they were available, flavored cigarettes were being tried and used primarily by the young.⁷² Candy-flavored cigarettes clearly had their greatest appeal to new smokers, 90% of whom were teens or younger. Research indicated that youth and young adults were more likely to notice flavored tobacco products and their ads, and this awareness translated into higher use rates among young smokers.

- Older adolescents and young adults aged 17 to 19 years old were more than twice as likely to report using flavored cigarettes (specifically Camel Exotic blends, Kool Smooth Fusion or Salem Silver Label brands) in the past 30 days compared to those aged 22 years or older.⁷³
- A significant gradient in flavored cigarette use was seen across age, with the highest rates of utilization among 17 year old smokers (22.8%) and 18-19 year old smokers (21.7%). Nine% of 24-26 year olds reported flavored cigarette use.⁷⁴

Tobacco Companies Have Long Recognized that Flavored Products Appeal to Youth

The tobacco companies know that almost all new tobacco users begin their addiction as kids, but they also know that to novice smokers, tobacco can be harsh and unappealing. Internal tobacco industry documents show that tobacco companies have a long history of using flavors to reduce the harshness of their products to make them more appealing to new users, almost all of whom are under age 18.⁷⁵ By masking the harshness and soothing the irritation caused by tobacco smoke, flavors make it easier for beginners – primarily kids – to try the product and ultimately become addicted. As early as the 1970s, the tobacco companies were discussing the “benefits” of sweet flavors. Their internal documents and public statements show that the tobacco industry's use of sweet flavors goes beyond just encouraging current smokers to switch brands, but rather to attract new users, mostly kids.

- As early as 1972, advisors to Brown & Williamson reviewed new concepts for a “youth cigarette,” including cola and apple flavors, and a “sweet flavor cigarette,” stating, “It's a well-known fact that teenagers like sweet products. Honey might be considered.”⁷⁶
- A 1974 summary of an RJR meeting discussed cigarettes designed for beginning smokers, noting that such a cigarette should be “low in irritation and possibly contain added flavors to make it easier for those who never smoked before to acquire the taste of it more quickly.”⁷⁷
- An RJR interoffice memo revealed ideas for new products: “Make a cigarette which is obviously youth oriented. This could involve cigarette name, blend, flavor and marketing technique....for example, a flavor which would be candy-like but give the satisfaction of a cigarette.”⁷⁸
- A Lorillard report summarizing the test results from new cigarette flavors, included smokers' description of “Tutti Frutti” flavored cigarettes as “for younger people, beginner cigarette smokers, teenagers . . . when you feel like a light smoke, want to be reminded of bubblegum.”⁷⁹

- A UST document called “The graduation theory” stated: “New users of smokeless tobacco – attracted to the product for a variety of reasons – are most likely to begin with products that are milder tasting, more flavored, and/or easier to control in the mouth. After a period of time, there is a natural progression of product switching to brands that are more full-bodied, less flavored, have more concentrated ‘tobacco taste’ than the entry brand.”⁸⁰
- A former UST sales representative revealed that, “Cherry Skoal is for somebody who likes the taste of candy, if you know what I’m saying.”⁸¹

What States and Localities Can Do

In addition to the federal ban on flavored cigarettes, states and localities can implement additional sales restrictions to address the remaining flavored tobacco products on the market, including menthol cigarettes.

Five states—California, Massachusetts, New Jersey, New York and Rhode Island—have enacted laws or rules to prohibit the sale of flavored e-cigarettes, and both California and Massachusetts prohibit the sale of menthol cigarettes and other flavored tobacco products. Maryland and Utah also restrict the sale of some flavored e-cigarettes. In addition, over 360 localities across the country restrict the sale of flavored tobacco products, although laws differ in their application to specific products and store types.

For a list of state and localities that have passed restrictions on the sale of flavored tobacco products, visit: <https://www.tobaccofreekids.org/assets/factsheets/0398.pdf>.

Campaign for Tobacco-Free Kids, May 16, 2023 / Laura Bach

¹ See U.S. Food and Drug Administration’s (FDA) Flavored Tobacco webpage at

<http://www.fda.gov/TobaccoProducts/GuidanceComplianceRegulatoryInformation/FlavoredTobacco/default.htm>.

² Brown, JE, et al., “Candy Flavorings in Tobacco,” *New England Journal of Medicine*, DOI: 10.1056/NEJMc1403015, May 7, 2014, <http://www.nejm.org/doi/full/10.1056/NEJMc1403015>.

³ Morris, DS, Fiala, SC, “Flavoured, non-cigarette tobacco for sale in the USA: an inventory analysis of Internet retailers,” *Tobacco Control* [Epub ahead of print] doi: 10.1136/tobaccocontrol-2013-051059, August 8, 2013.

⁴ “Flavors Add New Dimension to Tobacco,” *Convenience Store News*, October 1, 2007.

⁵ Kostygina, G, Glantz, S, & Ling, PM, “Tobacco industry use of flavours to recruit new users of little cigars and cigarillos,” *Tobacco Control* 25(1):66-74, January 2016.

⁶ U.S. Alcohol and Tobacco Tax and Trade Bureau (TTB), Tobacco Statistics. December 2000 & December 2020, <https://www.ttb.gov/tobacco/tobacco-stats.shtml>.

⁷ Niksic, M, “Flavored Smokes: Mmmmm...More Profits?” *Tobacco Retailer*, April 2007, http://tobacco-retailer.com/uploads/Features/2007/0407_flavored_smokes.asp.

⁸ Niksic, M, “Flavored Smokes: Mmmmm...More Profits?” *Tobacco Retailer*, April 2007, http://tobacco-retailer.com/uploads/Features/2007/0407_flavored_smokes.asp.

⁹ Delnevo, CD, et al., “Cigar Sales in Convenience Stores in the US, 2009-2020,” *JAMA* 326(23):2429-2432.

¹⁰ Delnevo, CD, et al., “Changes in the mass-merchandise cigar market since the Tobacco Control Act,” *Tobacco Regulatory Science*, 3(2 Suppl 1): S8-S16, 2017.

¹¹ Wang, X, et al., “Trends in Cigar Sales and Prices, by Product and Flavor Type—the United States, 2016-2020,” *Nicotine and Tobacco Research*, Advance access. <https://doi.org/10.1093/ntr/ntab238>, December 15, 2021.

¹² SAMHSA’s public online data analysis system (PDAS). National Survey on Drug Use and Health, 2016, https://pdas.samhsa.gov/#/survey/NSDUH-2016-DS0001?column=CATAG2&results_received=true&row=CGR30BR2&weight=ANALWT_C.

¹³ Gammon, DG, et al., “National and state patterns of concept-flavoured cigar sales, USA, 2012-2016,” *Tobacco Control*, published online August 1, 2018. See also Viola, AS, et al., “A cigar by any other name would taste as sweet,” *Tobacco Control*, published online October 1, 2015. Delnevo, CD, et al., “Changes in the mass-merchandise cigar market since the Tobacco Control Act,” *Tobacco Regulatory Science*, 3(2 Suppl 1): S8-S16, 2017.

¹⁴ Delnevo, CD, et al., “Close, but no cigar: certain cigars are pseudo-cigarettes designed to evade regulation,” *Tobacco Control*, Online first, doi:10.1136/tobaccocontrol-2016-052935, May 24, 2016.

¹⁵ HHS, *Preventing Tobacco Use Among Youth and Young Adults, A Report of the Surgeon General*, 2012, <http://www.cdc.gov/Features/YouthTobaccoUse/>.

¹⁶ House Committee on Energy & Commerce, “Energy and Commerce Committee Requests Information on Sales and Marketing of Flavored Tobacco Products,” October 2, 2009, accessed April 18, 2012 at <http://democrats.energycommerce.house.gov/index.php?q=news/energy-and-commerce-committee-requests-information-on-sales-and-marketing-of-flavored-tobacco-p>.

- ¹⁷ Representative Henry A. Waxman, “Rep. Waxman Urges FDA to Ban Clove-Flavored Cigars,” Letter to FDA Commissioner Margaret Hamburg, March 28, 2011, accessed April 18, 2012 at <http://democrats.energycommerce.house.gov/index.php?q=news/rep-waxman-urges-fda-to-ban-clove-flavored-cigars>.
- ¹⁸ FDA, Center for Tobacco Products, “FDA takes action against four tobacco manufacturers for illegal sales of flavored cigarettes labeled as little cigars or cigars,” December 9, 2016, <http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm532563.htm>.
- ¹⁹ Zhu, S-H, et al., “Evolution of Electronic Cigarette Brands from 2013-2014 to 2016-2017: Analysis of Brand Websites,” *Journal of Medical Internet Research*, 20(3), published online March 12, 2018.
- ²⁰ HHS, *E-Cigarette Use Among Youth and Young Adults. A Report of the Surgeon General*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2016.
- ²¹ CDC Foundation & Information Resources, Inc., “Monitoring U.S. E-Cigarette Sales: National Trends,” <https://www.cdcfoundation.org/programs/monitoring-e-cigarette-use-among-youth>. Data from Information Resources, Inc. (IRI), which includes e-cigarette sales data from convenience stores, gas stations and other retail store chains. Sales from the internet and tobacco-specialty stores, including vape shops, are not included.
- ²² CDC Foundation & Information Resources, Inc., “Monitoring U.S. E-Cigarette Sales: National Trends,” <https://www.cdcfoundation.org/programs/monitoring-e-cigarette-use-among-youth>. Data from Information Resources, Inc. (IRI), which includes e-cigarette sales data from convenience stores, gas stations and other retail store chains. Sales from the internet and tobacco-specialty stores, including vape shops, are not included.
- ²³ CDC Foundation & Information Resources, Inc., “Monitoring U.S. E-Cigarette Sales: National Trends,” <https://www.cdcfoundation.org/programs/monitoring-e-cigarette-use-among-youth>. Data from Information Resources, Inc. (IRI), which includes e-cigarette sales data from convenience stores, gas stations and other retail store chains. Sales from the internet and tobacco-specialty stores, including vape shops, are not included.
- ²⁴ Gentzke, A, et al., “Tobacco Product Use and Associated Factors Among Middle and High School Students—National Youth Tobacco Survey, United States, 2021,” *MMWR* 71(5): 1-29, March 10, 2022, <https://www.cdc.gov/mmwr/volumes/71/ss/pdfs/ss7105a1-H.pdf>.
- ²⁵ Alpert, HR, et al., “Free nicotine content and strategic marketing of moist snuff tobacco products in the United States: 2000-2006,” *Tobacco Control* 17:332-338, 2008.
- ²⁶ Delnevo, C, et al., “Examining market trends in the United States smokeless tobacco use: 2005 – 2011,” *Tobacco Control*, October 31, 2012, doi:10.1136/tobaccocontrol-2012-050739.
- ²⁷ U.S. Federal Trade Commission (FTC), *Smokeless Tobacco Report for 2020*, October 2021, <https://www.ftc.gov/system/files/documents/reports/federal-trade-commission-cigarette-report-2020-smokeless-tobacco-report-2020/p114508fy20smokelesstobacco.pdf> [top 5 manufacturers are Altria Group, Inc., North Atlantic Trading Company, Inc., Reynolds American, Inc., Swedish Match North America, Inc., and Swisher International Group, Inc.].
- ²⁸ Delnevo, CD, et al., “Examining market trends in smokeless tobacco sales in the United States: 2011-2019,” *Nicotine & Tobacco Research*, published online November 26, 2020.
- ²⁹ Delnevo, CD, et al., “Examining market trends in smokeless tobacco sales in the United States: 2011-2019,” *Nicotine & Tobacco Research*, published online November 26, 2020.
- ³⁰ “Flavors Add New Dimension to Tobacco,” *Convenience Store News*, October 1, 2007.
- ³¹ American Lung Association, *An Emerging Deadly Trend: Waterpipe Tobacco Use*, February 2007, http://www.lungusa2.org/embargo/slati/TrendAlert_Waterpipes.pdf.
- ³² Villanti, A., et al., “Changes in the prevalence and correlates of menthol cigarette use in the USA, 2004–2014,” *Tobacco Control*, published online October 20, 2016.
- ³³ U.S. Federal Trade Commission (FTC), *Cigarette Report for 2021, 2023*, https://www.ftc.gov/system/files/ftc_gov/pdf/p114508cigarettereport2021.pdf [data for top 4 manufacturers only].
- ³⁴ Delnevo, CD, et al., “Assessment of Menthol and Nonmenthol Cigarette Consumption in the US, 2000 to 2018,” *JAMA Network Open*, published online August 7, 2020.
- ³⁵ Courtemanche, CJ, et al., “Influence of the Flavored Cigarette Ban on Adolescent Tobacco Use,” *American Journal of Preventive Medicine*, published online January 9, 2017.
- ³⁶ Ambrose, BK, et al., “Flavored Tobacco Product Use Among US Youth Aged 12-17 Years, 2013-2014,” *Journal of the American Medical Association*, published online October 26, 2015.
- ³⁷ Gentzke, A, et al., “Tobacco Product Use and Associated Factors Among Middle and High School Students—National Youth Tobacco Survey, United States, 2021,” *MMWR* 71(5): 1-29, March 10, 2022, <https://www.cdc.gov/mmwr/volumes/71/ss/pdfs/ss7105a1-H.pdf>.
- ³⁸ Villanti, AC, et al., “Flavored Tobacco Product Use Among U.S. Young Adults,” *American Journal of Preventive Medicine* 44(4):388-391, 2013.
- ³⁹ HHS, *Preventing Tobacco Use Among Youth and Young Adults, A Report of the Surgeon General*, 2012, <http://www.cdc.gov/Features/YouthTobaccoUse/>.
- ⁴⁰ HHS, *E-Cigarette Use Among Youth and Young Adults. A Report of the Surgeon General*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2016.
- ⁴¹ Substance Abuse and Mental Health Administration (SAMHSA), HHS, *Results from the 2021 National Survey on Drug Use and Health, NSDUH: Detailed Tables*, Table 4.9A, <https://www.samhsa.gov/data/report/2021-nsduh-detailed-tables>. Cigars are defined as cigars, cigarillos or little cigars.
- ⁴² Gentzke, A, et al., “Tobacco Product Use and Associated Factors Among Middle and High School Students—National Youth Tobacco Survey, United States, 2021,” *MMWR* 71(5):1-29, March 10, 2022, <https://www.cdc.gov/mmwr/volumes/71/ss/pdfs/ss7105a1-H.pdf>.
- ⁴³ FDA, *Scientific Assessment of the Impact of Flavors in Cigar Products*, March 2022, <https://www.fda.gov/media/157595/download>.

- ⁴⁴ Ambrose, BK, et al., "Flavored Tobacco Product Use Among US Youth Aged 12-17 Years, 2013-2014," *Journal of the American Medical Association*, published online October 26, 2015.
- ⁴⁵ King, BA, Dube, SR, & Tynan, MA, "Flavored Cigar Smoking Among U.S. Adults: Findings From the 2009–2010 National Adult Tobacco Survey," *Nicotine & Tobacco Research*, August 27, 2012.
- ⁴⁶ King, BA, Dube, SR, & Tynan, MA, "Flavored Cigar Smoking Among U.S. Adults: Findings From the 2009–2010 National Adult Tobacco Survey," *Nicotine & Tobacco Research*, August 27, 2012.
- ⁴⁷ Delnevo, C, et al., "Preference for flavoured cigar brands among youth, young adults and adults in the USA," *Tobacco Control* 24(4):389-94, 2015.
- ⁴⁸ Cooper, M et al., "E-Cigarette Use Among Middle and High School Students—United States, 2022," *MMWR*, 71(40): 1283-1285, October 7, 2022, <https://www.cdc.gov/mmwr/volumes/71/wr/pdfs/mm7140a3-H.pdf>.
- ⁴⁹ Cooper, M et al., "E-Cigarette Use Among Middle and High School Students—United States, 2022," *MMWR*, 71(40): 1283-1285, October 7, 2022, <https://www.cdc.gov/mmwr/volumes/71/wr/pdfs/mm7140a3-H.pdf>.
- ⁵⁰ United States Department of Health and Human Services, National Institutes of Health, National Institute on Drug Abuse, and United States Department of Health and Human Services, Food and Drug Administration, Center for Tobacco Products. (2021). Past 30-Day Use of Flavored Electronic Nicotine Delivery Systems (ENDS) Among Youth (Aged 12-17) by Sociodemographics. In PATH Study Data Tables and Figures. Inter-university Consortium for Political and Social Research [distributor]. <https://www.icpsr.umich.edu/files/NAHDAP/pathstudy/Youth-30Day-Flavored-ENDS.pdf>.
- ⁵¹ FDA, "Modifications to Compliance Policy for Certain Deemed Products: Guidance for Industry, Draft Guidance," March 13, 2019, <https://www.fda.gov/media/121384/download>. While the methodology is not comparable to the PATH study, the 2019 NYTS found that 68.8% of middle and high school e-cigarette users had used a flavored tobacco product in the past month. Wang, TW, et al., "Tobacco Product Use and Associated Factors Among Middle and High School Students—United States, 2019," *MMWR*, 68(12): December 6, 2019, <https://www.cdc.gov/mmwr/volumes/68/ss/pdfs/ss6812a1-H.pdf>.
- ⁵² Wang, TW, et al., "E-cigarette Use Among Middle and High School Students – United States, 2020," *MMWR*, Volume 69, September 9, 2020, <https://www.cdc.gov/mmwr/volumes/69/wr/pdfs/mm6937e1-H.pdf>.
- ⁵³ Cooper, M et al., "E-Cigarette Use Among Middle and High School Students—United States, 2022," *MMWR*, 71(40): 1283-1285, October 7, 2022, <https://www.cdc.gov/mmwr/volumes/71/wr/pdfs/mm7140a3-H.pdf>.
- ⁵⁴ Bonhomme, MG, et al., "Flavoured non-cigarette tobacco product use among US adults: 2013-2014," *Tobacco Control*, 25: ii4-ii13, 2016.
- ⁵⁵ Pepper, JK, et al., "Adolescents' interest in trying flavoured e-cigarettes," *Tobacco Control*, 25:ii62-ii66, published online September 15, 2016.
- ⁵⁶ Kong, G, et al., "Reasons for Electronic Cigarette Experimentation and Discontinuation Among Adolescents and Young Adults," *Nicotine & Tobacco Research* 17(7):847-54, July 2015.
- ⁵⁷ Connolly, GN, "The Marketing of Nicotine Addiction by One Oral Snuff Manufacturer," *Tobacco Control* 4(1):73-79, Spring 1995.
- ⁵⁸ Gentzke, A, et al., "Tobacco Product Use and Associated Factors Among Middle and High School Students—National Youth Tobacco Survey, United States, 2021," *MMWR* 71(5): 1-29, March 10, 2022, <https://www.cdc.gov/mmwr/volumes/71/ss/pdfs/ss7105a1-H.pdf>.
- ⁵⁹ Ambrose, BK, et al., "Flavored Tobacco Product Use Among US Youth Aged 12-17 Years, 2013-2014," *Journal of the American Medical Association*, published online October 26, 2015.
- ⁶⁰ See e.g., Ambrose, BK, et al., "Flavored Tobacco Product Use Among US Youth Aged 12-17 Years, 2013-2014," *Journal of the American Medical Association*, published online October 26, 2015. Wackowski, OA and Delnevo, CD, "Young Adults' Risk Perceptions of Various Tobacco Products Relative to Cigarettes: Results from the National Young Adult Health Survey," *Health Education & Behavior*, published online August 24, 2015. Villanti, AC, et al., "Correlates of Hookah Use and Predictors of Hookah Trial in U.S. Young Adults," *American Journal of Preventive Medicine*, 48(6):742-746, 2015.
- ⁶¹ CDC, "Hookahs." Available at http://www.cdc.gov/tobacco/data_statistics/fact_sheets/tobacco_industry/hookahs/. Accessed March 4, 2016.
- ⁶² CDC, "Dangers of Hookah Smoking." Available at <http://www.cdc.gov/features/hookahsmoking/>. Accessed March 4, 2016.
- ⁶³ World Health Organization. WHO Advisory Note: "Waterpipe Tobacco Smoking: Health Effects, Research Needs and Recommended Actions by Regulators," WHO 2005; HHS, *Prevention Tobacco Use Among Youth and Young Adults, A Report of the Surgeon General*, 2012, <http://www.surgeongeneral.gov/library/reports/preventing-youth-tobacco-use/index.html>; American Lung Association, *An Emerging Deadly Trend: Waterpipe Tobacco Use*, February 2007, http://www.lungusa2.org/embargo/slati/TrendAlert_Waterpipes.pdf. American Lung Association, *Hookah Smoking: A Growing Threat to Public Health*, 2011, <http://www.lung.org/assets/documents/tobacco/hookah-policy-brief-updated.pdf>.
- ⁶⁴ Gentzke, A, et al., "Tobacco Product Use and Associated Factors Among Middle and High School Students—National Youth Tobacco Survey, United States, 2021," *MMWR* 71(5): 1-29, March 10, 2022, <https://www.cdc.gov/mmwr/volumes/71/ss/pdfs/ss7105a1-H.pdf>.
- ⁶⁵ Ambrose, BK, et al., "Flavored Tobacco Product Use Among US Youth Aged 12-17 Years, 2013-2014," *Journal of the American Medical Association*, published online October 26, 2015.
- ⁶⁶ FDA, *Preliminary Scientific Evaluation of the Possible Public Health Effects of Menthol versus Nonmenthol Cigarettes*, 2013.
- ⁶⁷ Wang, TW, et al., "Tobacco Product Use and Associated Factors Among Middle and High School Students—United States, 2019," *MMWR* 68(12), December 6, 2019, <https://www.cdc.gov/mmwr/volumes/68/ss/pdfs/ss6812a1-H.pdf>.
- ⁶⁸ Ambrose, BK, et al., "Flavored Tobacco Product Use Among US Youth Aged 12-17 Years, 2013-2014," *Journal of the American Medical Association*, published online October 26, 2015.
- ⁶⁹ SAMHSA's public online data analysis system (PDAS), National Survey on Drug Use and Health, 2016. https://pdas.samhsa.gov/#/survey/NSDUH-2016-DS0001?column=CATAG3&results_received=true&row=CIG30BR2&weight=ANALWT_C and https://pdas.samhsa.gov/#/survey/NSDUH-2016-DS0001?column=CATAG3&control=NEWRACE2&results_received=true&row=CIG30BR2&weight=ANALWT_C.
- ⁷⁰ Tobacco Products Scientific Advisory Committee, *Menthol Cigarettes and Public Health: Review of the Scientific Evidence and Recommendations*, July 21, 2011,

<http://www.fda.gov/downloads/AdvisoryCommittees/CommitteesMeetingMaterials/TobaccoProductsScientificAdvisoryCommittee/UCM269697.pdf>

⁷¹ FDA, *Preliminary Scientific Evaluation of the Possible Public Health Effects of Menthol versus Nonmenthol Cigarettes*, 2013.

⁷² Carpenter, CM, et al, "New Cigarette Brands with Flavors that Appeal to Youth: Tobacco Marketing Strategies," *Health Affairs* 24(6):1601-1610, Nov/Dec 2005. Lewis, M, et al., "Dealing with an Innovative Industry: A Look at Flavored Cigarettes Promoted by Mainstream Brands," *American Journal of Public Health* 96(2), February 2006.

⁷³ Klein, S, et al., Use of flavored cigarettes among older adolescent and adult smokers: United States, 2004 – 2005," *Nicotine and Tobacco Research*, Volume 10, Number 7, July 2008.

⁷⁴ Klein, S et al., Use of flavored cigarettes among older adolescent and adult smokers: United States, 2004 – 2005," *Nicotine and Tobacco Research*, Volume 10, Number 7, July 2008.

⁷⁵ HHS, *Preventing Tobacco Use Among Youth and Young Adults, A Report of the Surgeon General*, 2012, <http://www.cdc.gov/Features/YouthTobaccoUse/>.

⁷⁶ Marketing Innovations, "Youth Cigarette - New Concepts," Memo to Brown & Williamson, September 1972, Bates No. 170042014.

⁷⁷ R.J. Reynolds Tobacco Company, "Conference report #23," June 5, 1974, Bates No. 500254578-4580.

⁷⁸ R.J. Reynolds Inter-office Memorandum, May 9, 1974, Bates No. 511244297-4298.

⁷⁹ R.M. Manko Associates report for Lorillard, Summary Report: New Flavors Focus Group Sessions, August, 1978, Bates No. 85093450-3480.

⁸⁰ Connolly, GN, "The Marketing of Nicotine Addiction by One Oral Snuff Manufacturer," *Tobacco Control* 4(1):73-79, Spring 1995.

⁸¹ "Juiced Up: How a Tobacco Giant Doctors Snuff Brands to Boost Their 'Kick,'" *The Wall Street Journal*, October 26, 1994.