



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 flavorings helped mask the harshness, making the products easier to smoke.⁵ Recently, there has been an explosion of cheap, flavored cigars. Sales of all cigars (i.e., large cigars, cigarillos and small cigars) more than doubled between 2000 and 2017, from 6.1 billion cigars to 13.3 billion cigars, and sales have been generally increasing at a time when cigarette sales have 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. 2015 Nielsen convenience store market scanner data show that sales of flavored cigars increased by nearly 50% since 2008. As a proportion of all cigar sales in these stores, the share of flavored cigars rose from 43.6% in 2008 to 52.1% in 2015. Among flavored cigars sold in these stores in 2015, the most popular flavors were fruit (38.8%), sweet or candy (21.2%), and wine (17.0%). Further, the number of unique cigar flavor names more than doubled from 2008 to 2015, from 108 to 250.⁹

Including additional store types, Nielsen data showed that flavored cigars made up 43% of cigar sales in 2015, an increase from 2011.¹⁰

- 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.¹¹ 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 46.¹² 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.¹³ 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.¹⁴ 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.¹⁵ Rep. Waxman discovered that Kretek International intentionally changed their cigarettes to cigars to exploit a loophole in the TCA.¹⁶ 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.¹⁷

Electronic Cigarettes. Although these products are relatively new to the market, the variety of flavors available for use in e-cigarettes has grown exponentially. 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.”**¹⁸

- As of 2017, researchers had identified more than 15,500 unique e-cigarette flavors available online.¹⁹ An earlier study of e-cigarette flavors found that among the more than 400 brands available online in 2014, 84% offered fruit flavors and 80% offered candy and dessert flavors.²⁰
- In addition to the more traditional candy and fruit flavors like cherry and chocolate, the liquid nicotine solutions are also being sold in such kid-friendly options as cotton candy, root beer float, and banana split. One study even uncovered over twenty different types of unicorn-flavored e-liquid, often paired with cartoon imagery, undoubtedly appealing to kids.²¹
- “Vape shops,” which are specialty e-cigarette retail stores, offer an even wider assortment of flavors. In addition to the pre-made options, these stores allow patrons to mix their own preferred flavor combinations.²²

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. In 2012, e-cigarette companies began airing media campaigns on

television. One study found that exposure of youth aged 12-17 to television e-cigarette advertising increased 256% from 2011 to 2013 and that e-cigarette companies advertise their products to a broad audience that includes 24 million youth.²³ Ads for the blu brand (then owned by Lorillard) accounted for 81% of the youth exposure.²⁴ The 2019 National Youth Tobacco Survey found that 69.3% of middle and high school students—over 18.2 million youth—had been exposed to e-cigarette advertisements from at least one source.²⁵

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.²⁶ 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.²⁷ Current Skoal flavors include kid-friendly peach, citrus, cherry, berry, and apple.
- Between 2005 and 2011, sales of moist snuff increased by more than two-thirds; increases in the sale of *flavored* moist snuff accounted for about 60% of this growth.²⁸ In 2012, flavored products made up more than half (58%) of all smokeless tobacco sales. Menthol and mint flavors are most popular, followed by fruit flavors.²⁹
- In 2015, flavored products made up more than half of all smokeless tobacco sales. Menthol and mint flavors were by far the most popular.³⁰
- A trade publication for convenience stores quoted one retailer stating, “In the case of smokeless tobacco, you get a new flavor once every quarter.”³¹

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.³²

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.³³

- Data from the Federal Trade Commission (FTC) show that in 2017 (the most recent year for which data are available), menthol cigarettes comprised 36% of the market, the highest proportion on record since FTC began collecting this data in 1963.³⁴
- 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 Data from the 2014-2015 wave of the PATH study found that 72.3% of current tobacco users had used a flavored tobacco product in the past month.³⁷ 4.3 million middle and high schools use flavored tobacco products.³⁸

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.³⁹

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.”⁴⁰ 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.⁴¹

Cigars. More than 1,600 children under age 18 try cigar smoking for the first time every day.⁴² Teens and young adults are much more likely than adults 25 years and older to report smoking cigars.⁴³ Research demonstrates that flavored cigars are driving much of this usage and not surprisingly, flavored cigars are the most popular among youth. Cheap, sweet cigars can serve as an entry product for kids to a lifetime of smoking.

- The 2016-2017 wave of the PATH study found that 56.8% of 12-17 year olds who had ever smoked cigarillos started with a flavored product.⁴⁴ Older data from the 2014-2015 wave of the PATH study, which assessed use of all cigar types, found that 53.7% of current youth cigar smokers had used a flavored product in the last month.⁴⁵ In 2013-2014, 73.8% of youth cigar smokers reported that they smoked cigars “because they come in flavors I like.”⁴⁶
- 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%).⁴⁷
- 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.⁴⁸
- 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.⁴⁹

E-Cigarettes. Given the dramatic growth in the availability and marketing of flavored e-cigarettes, it’s no surprise that e-cigarettes have been the most commonly used tobacco product among youth since 2014. Among high school students, e-cigarette use more than doubled from 2017 to 2019, increasing from 11.7% to 27.5%. Over 5.3 million youth were current e-cigarette users in 2019 - an increase of over 3 million students since 2017.⁵⁰

One tobacco company has even acknowledged that youth are attracted to sweet flavored products. Lorillard Inc.’s Youth Smoking Prevention Program posted a page on e-cigarettes on its “Real Parents Real Questions” website that stated: “Kids may be particularly vulnerable to trying e-cigarettes due to an abundance of fun flavors such as cherry, vanilla, piña-colada and berry.”⁵¹

- Data from the 2016-2017 wave of the PATH study found that 96.1% of 12-17 year olds who had initiated e-cigarette use since the last survey wave started with a flavored product. Additionally, it found that 97% of current youth e-cigarette users had used a flavored e-cigarette in the past month and 70.3% say they use e-cigarettes “because they come in flavors I like.”⁵²
- The 2019 NYTS found that 3.7 million middle and high schoolers use flavored e-cigarettes.⁵³ 57.3% of high school e-cigarette users use mint or menthol flavors, an increase from 38.1% in 2018.⁵⁴ Among high school Juul users, mint is the most popular flavor.⁵⁵
- 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.⁵⁶

- 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.⁵⁷
- 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%).⁵⁸

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.⁵⁹

- Although cigarette smoking among youth in the U.S. has declined rapidly since the Tobacco Control Act went into effect, use of smokeless tobacco among youth has not followed that same trend, and among high school boys, the prevalence of smokeless tobacco use is slightly same as that of cigarettes (7.5 vs. 7.3%).⁶⁰
- The 2014-2015 PATH study found that 62.7% of current smokeless tobacco users had used a flavored product in the last month. ⁶¹ The 2013-2014 PATH study found that 68.9% of 12-17 year olds who had ever used smokeless tobacco used flavored smokeless tobacco the first time they tried the product. ⁶²
- Among youth smokeless tobacco users, mint and menthol are the most popular flavors.⁶³

Hookah. Research shows that many youth and young adults perceive hookah to be safer than other combustible tobacco products.⁶⁴ 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.⁶⁵ 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 puffs⁶⁶, potentially exposing the user to more smoke over a greater period of time than what occurs when smoking a regular cigarette.⁶⁷ The appeal of flavored hookah undoubtedly contributes to its popularity among youth and young adults.

- The 2014-2015 PATH study found that 71.5% of current youth hookah users had used a flavored product in the last month. ⁶⁸
- 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.”⁶⁹

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. ⁷⁰

- Over half (54%) of youth smokers ages 12-17 use menthol cigarettes compared to one-third (32%) of older adult smokers.⁷¹ Prevalence of menthol use is even higher among African Americans: 85% of all African-American smokers smoke menthol cigarettes and seven out of ten African-American youth smokers smoke menthol cigarettes.⁷²
- According to the 2019 NYTS, half a million middle and high school students are menthol cigarette smokers.⁷³
- 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.⁷⁴

- Daily menthol cigarette smokers have higher odds of also using flavored little cigars/cigarillos compared to occasional non-menthol smokers.⁷⁵

According to FDA's Tobacco Product Scientific Advisory Committee (TPSAC):⁷⁶

- 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.⁷⁷ 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.⁷⁸ 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.⁷⁹
- 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.⁸⁰

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 18.⁸¹ 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.”⁸²
- 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.”⁸³
- 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.”⁸⁴
- 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.”⁸⁵

- 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.”⁸⁶
- 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.”⁸⁷

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, and their appeal to youth and young adults.

Despite inevitable pushback from the tobacco companies, states and localities have clear authority to restrict the sale of flavored tobacco products to reduce tobacco use and its harms to its citizens. Courts have held that state and local governments can prohibit or restrict the sale of flavored tobacco products and have rejected the argument that a prohibition on the sale or distribution of flavored products raises First Amendment issues.⁸⁸

Over 230 localities restrict sales of flavored tobacco products, although laws differ in their application to specific products and store types. At least 60 of these localities restrict the sale of menthol cigarettes.

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, December 6, 2019 / 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 2017,

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

¹⁰ Kuiper, NM, et al., “Trends in sales of flavored and menthol tobacco products in the United States during 2011-2015,” *Nicotine & Tobacco Research*, published online June 1, 2017.

¹¹ 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=ANAL.WT_C.

¹² 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.

¹³ 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.

¹⁴ HHS, *Preventing Tobacco Use Among Youth and Young Adults, A Report of the Surgeon General*, 2012,

<http://www.cdc.gov/Features/YouthTobaccoUse/>.

- 15 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>.
- 16 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>.
- 17 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>.
- 18 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.
- 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 Zhu, S-H, et al., "Four Hundred and Sixty Brands of E-cigarettes and Counting: Implications for Product Regulation," *Tobacco Control*, 23(Suppl 3):iii3-iii9, 2014.
- 21 Jackler, RK, and Ramamurthi, D. "Unicorn cartoons: marketing sweet and creamy e-juice to youth," *Tobacco Control*, published online August 19, 2016.
- 22 Johnson, A, "Up in smoke? Alamance e-cigarette store operators concerned about proposed regulations," *Times-News*, April 30, 2014, <http://www.thetimesnews.com/news/top-news/up-in-smoke-alamance-e-cigarette-store-operators-concerned-about-proposed-regulations-1.313005>. The website for VapeRite ATL also boasts that customers can "mix well over 100,000 possible flavor and mix type combinations" [<https://atlanta.vaperite.com/#vape-bar>, accessed May 30, 2014].
- 23 Duke, JC, et al., "Exposure to Electronic Cigarette Television Advertisements Among Youth and Young Adults," *Pediatrics*, June 2, 2014.
- 24 Duke, JC, et al., "Exposure to Electronic Cigarette Television Advertisements Among Youth and Young Adults," *Pediatrics*, June 2, 2014
- 25 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>.
- 26 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.
- 27 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.
- 28 Delnevo, CD, et al., "Examining market trends in the United States smokeless tobacco use: 2005-2011," *Tobacco Control*, 23: 107-112, 2014.
- 29 Chaloupka, F, et al., Analysis of 2012 Nielsen Store Data, results forthcoming.
- 30 Kuiper, NM, et al., "Trends in sales of flavored and menthol tobacco products in the United States during 2011-2015," *Nicotine & Tobacco Research*, published online June 1, 2017.
- 31 "Flavors Add New Dimension to Tobacco," *Convenience Store News*, October 1, 2007.
- 32 American Lung Association, *An Emerging Deadly Trend: Waterpipe Tobacco Use*, February 2007, http://www.lungusa2.org/embargo/slati/Trendalert_Waterpipes.pdf.
- 33 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.
- 34 U.S. Federal Trade Commission (FTC), *Cigarette Report for 2017*, 2019, https://www.ftc.gov/system/files/documents/reports/federal-trade-commission-cigarette-report-2017-federal-trade-commission-smokeless-tobacco-report/ftc_cigarette_report_2017.pdf [data for top 5 manufacturers only].
- 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 Rose, S, et al., "Flavour types used by youth and adult tobacco users in wave 2 of the Population Assessment of Tobacco and Health (PATH) Study 2015-2015," *Tobacco Control*, published online September 21, 2019. Additional national data from the 2019 National Youth Tobacco Survey (NYTS) found that 69.6% of current middle and high school tobacco users had used a flavored tobacco product in the past month.
- 38 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>.
- 39 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>.
- 40 Villanti, AC, et al., "Flavored Tobacco Product Use Among U.S. Young Adults," *American Journal of Preventive Medicine* 44(4):388-391, 2013.
- 41 HHS, *Preventing Tobacco Use Among Youth and Young Adults, A Report of the Surgeon General*, 2012, <http://www.cdc.gov/Features/YouthTobaccoUse/>.
- 42 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.
- 43 Substance Abuse and Mental Health Services Administration (SAMHSA), HHS, *Results from the 2018 National Survey on Drug Use and Health, NSDUH: Detailed Tables*, 2018. Cigars are defined as cigars, cigarillos or little cigars.
- 44 2013 YRBS. 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* 15(2):608-14, 2013, at 610, <http://ntr.oxfordjournals.org/content/15/2/608.full.pdf+html>.
- 45 FDA, "Modifications to Compliance Policy for Certain Deemed Products: Guidance for Industry, Draft Guidance," March 13, 2019, <https://www.fda.gov/media/121384/download>.

- 45 Rose, S, et al., Flavour types used by youth and adult tobacco users in wave 2 of the Population Assessment of Tobacco and Health (PATH) Study 2015-2015," *Tobacco Control*, published online September 21, 2019. While the methodology is not comparable to the PATH study, the 2019 NYTS found that 41.9% of middle and high school cigar smokers 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>.
- 46 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.
- 47 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.
- 48 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.
- 49 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.
- 50 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>.
- 51 Real Parents Real Answers, "What you need to know about e-cigarettes – Infographic," April 23, 2014, accessed November 7, 2014, <http://www.realparentsrealanswers.com/what-you-need-to-know-about-e-cigarettes-infographic/>.
- 52 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>.
- 53 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>.
- 54 Cullen, KA, et al., "e-Cigarette Use Among Youth in the United States, 2019" *JAMA*, published online November 5, 2019.
- 55 Leventhal, AM, et al., "Flavors of e-Cigarettes Used by Youths in the United States," *JAMA*, published online November 5, 2019.
- 56 Bonhomme, MG, et al., "Flavoured non-cigarette tobacco product use among US adults: 2013-2014," *Tobacco Control*, 25: ii4-ii13, 2016.
- 57 Pepper, JK, et al., "Adolescents' interest in trying flavoured e-cigarettes," *Tobacco Control*, 25:ii62-ii66, published online September 15, 2016.
- 58 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.
- 59 Connolly, GN, "The Marketing of Nicotine Addiction by One Oral Snuff Manufacturer," *Tobacco Control* 4(1):73-79, Spring 1995.
- 60 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>. CDC, "Tobacco Use Among Middle and High School Students—United States, 2000-2009," *MMWR*, 59(33): 1063-1068, <https://www.cdc.gov/mmwr/pdf/wk/mm5933.pdf>.
- 61 Rose, S, et al., Flavour types used by youth and adult tobacco users in wave 2 of the Population Assessment of Tobacco and Health (PATH) Study 2015-2015," *Tobacco Control*, published online September 21, 2019. The 2019 NYTS found that 48% of middle and high school smokeless tobacco users had used flavored smokeless tobacco 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>.
- 62 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.
- 63 Rose, S, et al., Flavour types used by youth and adult tobacco users in wave 2 of the Population Assessment of Tobacco and Health (PATH) Study 2015-2015," *Tobacco Control*, published online September 21, 2019.
- 64 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.
- 65 CDC, "Hookahs." Available at http://www.cdc.gov/tobacco/data_statistics/fact_sheets/tobacco_industry/hookahs/. Accessed March 4, 2016.
- 66 CDC, "Dangers of Hookah Smoking." Available at <http://www.cdc.gov/features/hookahsmoking/>. Accessed March 4, 2016.
- 67 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>.
- 68 Rose, S, et al., "Flavour types used by youth and adult tobacco users in wave 2 of the Population Assessment of Tobacco and Health (PATH) Study 2014-2015," *Tobacco Control*, published online September 21, 2019. The 2019 NYTS found that 31.2% of middle and high school hookah users had used flavored hookah tobacco 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>.
- 69 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.
- 70 FDA, *Preliminary Scientific Evaluation of the Possible Public Health Effects of Menthol versus Nonmenthol Cigarettes*, 2013.

- 71 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.
- 72 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
- 73 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>.
- 74 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.
- 75 Sterling, K, et al., "Association between menthol-flavoured cigarette smoking and flavoured little cigar and cigarillo use among African-American, Hispanic, and white young and middle-aged adult smokers," *Tobacco Control* 25(Suppl 2):ii21-ii31, November 2016.
- 76 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>
- 77 FDA, *Preliminary Scientific Evaluation of the Possible Public Health Effects of Menthol versus Nonmenthol Cigarettes*, 2013.
- 78 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.
- 79 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.
- 80 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.
- 81 HHS, *Preventing Tobacco Use Among Youth and Young Adults, A Report of the Surgeon General*, 2012, <http://www.cdc.gov/Features/YouthTobaccoUse/>.
- 82 Marketing Innovations, "Youth Cigarette - New Concepts," Memo to Brown & Williamson, September 1972, Bates No. 170042014.
- 83 R.J. Reynolds Tobacco Company, "Conference report #23," June 5, 1974, Bates No. 500254578-4580.
- 84 R.J. Reynolds Inter-office Memorandum, May 9, 1974, Bates No. 511244297-4298.
- 85 R.M. Manko Associates report for Lorillard, Summary Report: New Flavors Focus Group Sessions, August, 1978, Bates No. 85093450-3480.
- 86 Connolly, GN, "The Marketing of Nicotine Addiction by One Oral Snuff Manufacturer," *Tobacco Control* 4(1):73-79, Spring 1995.
- 87 "Juiced Up: How a Tobacco Giant Doctors Snuff Brands to Boost Their 'Kick,'" *The Wall Street Journal*, October 26, 1994.
- 88 National Association of Tobacco Outlets v. City of Providence, 731 F.3d 71 (1st Cir. 2013); U.S. Smokeless Tobacco Company v. FDA , 708 F.3d 428 (2d Cir. 2013).