



Tobacco Flavoring

THE HISTORY AND WHERE WE ARE NOW

In 2009, the Family Smoking Prevention and Tobacco Control Act gave the U.S Food and Drug Administration the authority to regulate tobacco products, including cigarettes, cigarette tobacco, roll-your-own tobacco, and smokeless tobacco.¹ The bill also banned the sale of flavored cigarettes, except for menthol. In 2016, the FDA extended its regulatory authority to all “tobacco products” including electronic cigarettes and other electronic nicotine delivery systems (ENDS), cigars, hookah, pipe tobacco, nicotine gels, dissolvable not already subject to regulation, and other products that might meet the definition of “tobacco product” in the future.¹

FDA has only just begun to take steps to regulate these newer products -- over 15,000 different e-cigarette flavors currently exist in the marketplace leading to an epidemic of youth use, and relatively few studies have been conducted to investigate the safety and inhalation toxicity for flavored products.² In January 2020, the FDA issued guidance that removed some flavored cartridge-based electronic nicotine delivery systems (ENDS) from the market, but exempted menthol- or tobacco-flavored cartridge-based e-cigarettes, any flavored disposable e-cigarettes, and e-liquids used in refillable, open tank systems. So, despite this ban, between February 2020 and October 2021, total e-cigarette sales increased 53%, sales of non-tobacco flavored e-cigarettes increased by almost 74%, and sales of disposable devices increased 205%.³

Menthol is one of the most common flavor additives used in cigarettes and other tobacco products, accounting for 37% of the cigarette market in the U.S in 2021⁴ and an increase in sales from 10.7% to 61% among prefilled e-cigarette cartridges in 2020.⁵ Between February 2020 and October 2021, menthol-flavored e-cigarette sales increased by almost 44%.³ A 2013 FDA analysis concluded that menthol cigarettes may increase youth initiation, and there has been great scientific debate on the role of menthol in nicotine dependence and cessation.⁶ A new analysis from the PATH study found that adults who smoked menthol cigarettes had lower odds of smoking cessation (non-Hispanic Black menthol smokers had a much lower odds of quitting than non-Hispanic White or Hispanic menthol users).⁷ The use of menthol cigarettes is particularly prevalent among young adults and African Americans. An estimated 85.8% of African American smokers and 46% Hispanic smokers smoke menthol cigarettes in comparison to 28.7% of White smokers.⁸ African American and Hispanic communities are heavily targeted by tobacco companies, which may be a contributing factor to the high tobacco-related morbidity and mortality rates in these communities.⁹

Tobacco companies have focused heavily on flavorings because they know that’s what attracts a new generation of users. Research shows that flavoring, regardless of the tobacco product, increases the appeal to youth and adults. Many young adults perceive hookah as a safer alternative to cigarettes, offering a “smoother” experience due to the flavoring and the smoking techniques.¹⁰ This newly growing market of flavored tobacco products has become a pressing public health crisis as epidemic-levels of youth tobacco users are set up for a lifetime addiction.



Fact Sheet: Tobacco Flavorings

OVERVIEW

Despite the success of tobacco prevention and cessation programs, tobacco use is still highly prevalent among youth and adult populations. A decrease in cigarette smoking among youth has coincided with an increase in the use of e-cigarettes and other flavored tobacco products.¹⁰ 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.¹¹ One national study found that younger age was a significant predictor of flavored tobacco product use.¹² The increased appeal of e-cigarettes and other tobacco products has been popularized by the marketing and promotion of “fun, enticing” flavorings to youth and also to adults looking for nicotine alternatives to cigarettes.

- Results from the 2022 National Youth Tobacco Survey indicated that >2.5 million high school and middle school students report current use of e-cigarettes.¹³
- Almost 85% of youth users report using flavored e-cigarettes: Fruit (69.1%), candy/desserts (38.3%), mint (29.4%), menthol (26.6%), are the most popular flavors reported.¹³
- Disposable e-cigarettes are the most popularly used devices among youth users (55.3%), and Puff Bar the most popular brand (29.7%)¹³
- The PATH Study found that 81% of youth who had ever used a tobacco product started with a flavored product.¹²
- Data from the 2020 National Youth Tobacco Survey demonstrated that almost 78% of current tobacco youth product users reported using a flavored tobacco product.¹⁴

ANTICIPATED HEALTH RISKS

As individuals become increasingly addicted to flavored tobacco products there have been significant reports of severe respiratory illnesses and hospitalizations among youth and adults with use of e-cigarette products.¹⁵ Commonly added sugars to burley tobacco can lead to an increase in toxicants in tobacco smoke that are hazardous to the respiratory tract.¹⁶ Emerging studies have found that short-term exposure to aerosolized flavorings in e-cigarettes can have damaging effects on the regulation of blood vessel function due to their effects on endothelial cells which is a risk factor for cardiovascular disease.^{2,17}

Due to the widespread popularity of e-cigarettes and the use of menthol in all tobacco products, users are now inhaling large quantities of flavoring chemicals over extended periods of times. The use of flavored cigars, hookah, and flavored smokeless tobacco have all contributed to the increased use of tobacco and nicotine products. Little is known about the adverse health effects associated with flavored tobacco products; therefore, it is important for adults to use extreme caution when using these tobacco products, and youth should not use them at all.

THE ASSOCIATION ADVOCATES

The American Heart Association advocates for the elimination of all characterizing flavors other than tobacco from all tobacco products. The removal of all flavorings from tobacco products is necessary to reduce appeal to youth and adults. AHA is committed to ending tobacco and nicotine addiction in the U.S. Restricting flavors in all tobacco products should be a priority in achieving the tobacco endgame.

KEY TIPS/MESSAGES

- People who never smoked traditional cigarettes cite flavors as a reason they began using e-cigarettes.
- The easy availability of menthol cigarettes, flavored cigars, flavored hookah and youth friendly e-cigarette flavors is causing an increase in youth use of epidemic proportion.
- The removal of all characterizing flavors from all tobacco products is essential for reducing their appeal to youth.
- Menthol cigarettes are heavily marketed to African American smokers, 85.8% of whom use menthol products. Menthol is also popular with Latinos, 46% of whom use menthol products.⁸ Removal of menthol from tobacco products is essential to reduce the use of tobacco among youth and communities historically targeted by the tobacco industry.

Fact Sheet: Tobacco Flavorings

References

1. U.S. Department of Health and Human Services Food and Drug Administration. Regulation of Flavors in Tobacco Products. Updated March 21, 2018. Accessed September 30, 2019, <https://www.federalregister.gov/documents/2018/03/21/2018-05655/regulation-of-flavors-in-tobacco-products>
2. Bhatnagar A, Whitsel LP, Blaha MJ, et al. New and Emerging Tobacco Products and the Nicotine Endgame: The Role of Robust Regulation and Comprehensive Tobacco Control and Prevention: A Presidential Advisory From the American Heart Association. *Circulation*. 2019/05/07 2019;139(19)doi:10.1161/CIR.0000000000000669
3. CDC Foundation. *Monitoring U.S. E-Cigarette Sales: National Trends Data Brief*. October 2021. <https://www.cdcfoundation.org/National-E-CigaretteSales-DataBrief-2021-Oct31?inline>
4. U.S. Federal Trade Commission. *Federal Trade Commission Cigarette Report for 2021*. 2023. https://www.ftc.gov/system/files/ftc_gov/pdf/p114508cigarettereport2021.pdf
5. Ali FRM, Diaz MC, Vallone D, et al. E-cigarette Unit Sales, by Product and Flavor Type - United States, 2014-2020. *MMWR Morb Mortal Wkly Rep*. Sep 18 2020;69(37):1313-1318. doi:10.15585/mmwr.mm6937e2
6. U.S. Food and Drug Administration. *Preliminary Scientific Evaluation of the Possible Public Health Effects of Menthol versus Nonmenthol Cigarettes*. 2013.
7. Cook S, Hirschtick JL, Patel A, et al. A longitudinal study of menthol cigarette use and smoking cessation among adult smokers in the US: Assessing the roles of racial disparities and E-cigarette use. *Preventive Medicine*. 2022-01-01 2022;154:106882. doi:10.1016/j.ypmed.2021.106882
8. U.S. Food and Drug Administration. *Menthol and Other Flavors in Tobacco Products*. July 20, 2018. <https://www.fda.gov/tobacco-products/products-ingredients-components/menthol-and-other-flavors-tobacco-products>
9. Sterling K, Fryer C, Pagano I, Jones D, Fagan P. 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. *Tob Control*. Nov 2016;25(Suppl 2):ii21-ii31. doi:10.1136/tobaccocontrol-2016-053203
10. Sterling KL, Fryer CS, Majeed B, Duong MM. Promotion of waterpipe tobacco use, its variants and accessories in young adult newspapers: a content analysis of message portrayal. *Health Educ Res*. Feb 2015;30(1):152-61. doi:10.1093/her/cyu035
11. U.S. Department of Health and Human Services. *E-Cigarette Use Among Youth and Young Adults. A Report of the Surgeon General*. 2016. https://www.cdc.gov/tobacco/sqr/e-cigarettes/pdfs/2016_sqr_entire_report_508.pdf
12. Villanti AC, Johnson AL, Ambrose BK, et al. Flavored Tobacco Product Use in Youth and Adults: Findings From the First Wave of the PATH Study (2013–2014). *American journal of preventive medicine*. 2017-8 2017;53(2):139-151. doi:10.1016/j.amepre.2017.01.026
13. Cooper M. Notes from the Field: E-cigarette Use Among Middle and High School Students — United States, 2022. *MMWR Morbidity and Mortality Weekly Report*. 2022 2022;71doi:10.15585/mmwr.mm7140a3
14. U.S. Centers for Disease Control and Prevention. 2020 NYTS Dataset and Codebook. https://www.cdc.gov/tobacco/data_statistics/surveys/nyts/index.htm
15. Schier JG, Meiman JG, Layden J, et al. Severe Pulmonary Disease Associated with Electronic-Cigarette-Product Use - Interim Guidance. *MMWR Morb Mortal Wkly Rep*. Sep 13 2019;68(36):787-790. doi:10.15585/mmwr.mm6836e2
16. Cheah NP, Borst S, Hendrickx L, et al. Effect of Adding Sugar to Burley Tobacco on the Emission of Aldehydes in Mainstream Tobacco Smoke. *Tobacco Regulatory Science*. 2018-03-01 2018;4(2):61-72. doi:10.18001/trs.4.2.6
17. Lee WH, Ong SG, Zhou Y, et al. Modeling Cardiovascular Risks of E-Cigarettes With Human-Induced Pluripotent Stem Cell-Derived Endothelial Cells. *J Am Coll Cardiol*. Jun 4 2019;73(21):2722-2737. doi:10.1016/j.jacc.2019.03.476