



FLAVORED E-CIGARETTES HOOK KIDS

In recent years, tobacco companies have significantly stepped up the introduction and marketing of flavored non-cigarette tobacco products, especially e-cigarettes. These products are widely available and popular with kids. Flavored e-cigarettes are undermining the nation's overall efforts to reduce youth tobacco use and putting a new generation of kids at risk of nicotine addiction and the serious health harms that result from tobacco use.

Electronic Cigarettes Are the Most Popular Tobacco Product Among Youth

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.

- Among high school students, e-cigarette use declined to 19.6% in 2020, after increasing an alarming 135% from 2017 to 2019 (from 11.7% to 27.5%).¹ While the significant decline in youth users since 2019 is a sign of progress, youth e-cigarette use remains a public health crisis. 3.6 million kids use e-cigarettes, about the same as in 2018 when the U.S. Surgeon General first called youth e-cigarette use an “epidemic.”²
- The percentage of youth who use e-cigarettes frequently is growing, an indicator of serious addiction. In 2020, 38.9% of high school e-cigarette users reported vaping on 20 or more days/month (an increase from 34.2% in 2019), and 22.5% reported daily use. Over 730,000 middle and high school students are vaping every single day.³

E-Cigarettes are Widely Available in Kid-Friendly Flavors

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 18.⁴ In recent years, there has been an explosion of sweet-flavored tobacco products, especially e-cigarettes. As of 2017, researchers had identified more than 15,500 unique e-cigarette flavors available online.⁵ 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.⁶ In addition to the more traditional candy and fruit flavors like mango and mint, e-liquids are also being sold in such kid-friendly options as cotton candy and gummy bear. These products are widely available through convenience stores, other retail outlets and online retailers.

In January 2020, the 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. As a result, the popularity of these products has grown substantially:

- The market share of disposable devices nearly doubled between August 2019 and May 2020, from 10.3% to 19.8%.⁷
- As of May 2020, menthol-flavored products accounted for more than half (51.6%) of total e-cigarette sales, an increase from 11.4% in August 2019.⁸



Flavored E-Cigarettes Are Popular Among Youth

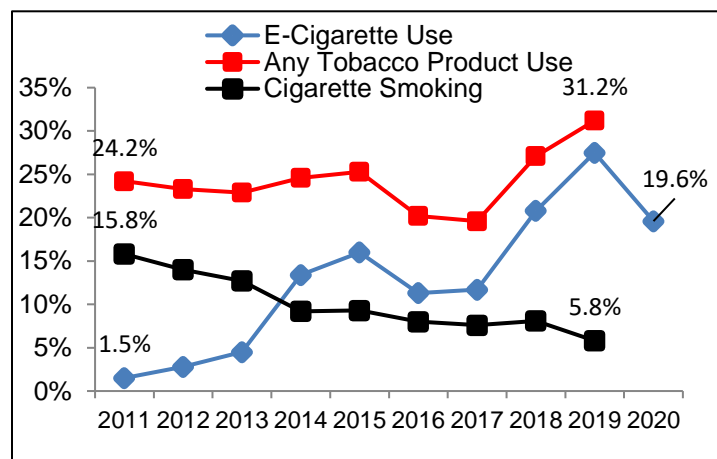
Flavors play a major role in youth use of e-cigarettes because they mask the taste of tobacco and make it easier for new users to initiate use. In addition, many youth perceive flavored tobacco products to be less harmful.⁹ The 2016 Surgeon General Report on e-cigarettes concluded that flavors are among the most commonly cited reasons for using e-cigarettes among youth and young adults.¹⁰

- The 2020 NYTS found that an increasing proportion of youth e-cigarette users are using flavored products (82.9%, up from 68.8% in 2019). Among high school students who currently used any type of flavored e-cigarette, the most commonly used flavor types were fruit (73.1%), mint (55.8%), menthol (37%), and candy, desserts, or other sweets (36.4%).¹¹
- Earlier data from the 2016-2017 wave of the FDA’s Population Assessment of Tobacco and Health study 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.”¹²
- 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. Among high school current e-cigarette users, use of disposable e-cigarettes increased by 1,000% from 2019 to 2020 (from 2.4% to 26.5%).¹³ Use of disposable e-cigarettes increased by 400% (from 3.0% to 15.2%) among middle school e-cigarette users over the same time period.¹⁴ Among current youth users of disposable e-cigarettes, the most commonly used flavor type is fruit (82.7%), followed by mint (51.9%).¹⁵

E-Cigarette Use Increases Risk for Smoking

Flavored tobacco products play a key role in enticing new users, particularly kids, to a lifetime of addiction. There is growing concern that use of e-cigarettes may function as a gateway to the use of more dangerous, combustible tobacco products.

- A 2018 report by the National Academies of Science, Engineering and Medicine (NASEM) concluded that, “There is substantial evidence that e-cigarette use increases risk of ever using combustible tobacco cigarettes among youth and young adults.”¹⁶
- A nationally representative analysis found that from 2013 to 2016, youth e-cigarette use was associated with more than four times the odds of trying cigarettes and nearly three times the odds of current cigarette use. The researchers estimate that this translates to over 43,000 current youth cigarette smokers who might not have become smokers without e-cigarettes.¹⁷



Youth e-cigarette use has undermined progress in reducing overall use in tobacco use—the increase in youth e-cigarette use from 2017 to 2019 led to a 59% increase in use of any tobacco product among high school students (from 19.6% to 31.2%).¹⁸

Health Effects of Flavored E-Cigarettes

Flavored e-cigarettes contain nicotine, the highly addictive chemical that makes it so easy to get hooked on tobacco products and so hard to quit. According to the Surgeon General, “The use of products containing nicotine in any form among youth, including in e-cigarettes, is unsafe.”¹⁹ Flavorings in e-cigarettes can also pose additional health hazards. According to the Surgeon General, “while some of the flavorings used in e-cigarettes are generally recognized as safe for ingestion as food, the health effects of

their inhalation are generally unknown” and noted that some of the flavorings found in e-cigarettes have been shown to cause serious lung disease when inhaled.²⁰ An article in the *Journal of the American Medical Association* raised concerns that the chemical flavorings found in some e-cigarettes and e-liquids could cause respiratory damage when the e-cigarette aerosol is inhaled deeply into the lungs.²¹

Campaign for Tobacco-Free Kids, September 18, 2020 / Laura Bach

¹ Cullen, KA, et al., “e-Cigarette Use Among Youth in the United States, 2019” *JAMA*, published online November 5, 2019.

² Office of the Surgeon General, “Surgeon General’s Advisory on E-Cigarette Use Among Youth,” December 18, 2018, <https://e-cigarettes.surgeongeneral.gov/documents/surgeon-generals-advisory-on-e-cigarette-use-among-youth-2018.pdf>.

³ 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>.

⁴ HHS, *Preventing Tobacco Use Among Youth and Young Adults, A Report of the Surgeon General*, 2012, <http://www.cdc.gov/Features/YouthTobaccoUse/>.

⁵ 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.

⁶ 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.

⁷ Ali, FMR, et al., “E-cigarette Unit Sales, by Product and Flavor Type — United States, 2014–2020,” *MMWR*, Volume 69, September 9, 2020, <https://www.cdc.gov/mmwr/volumes/69/wr/pdfs/mm6937e2-H.pdf>.

⁸ Ali, FMR, et al., “E-cigarette Unit Sales, by Product and Flavor Type — United States, 2014–2020,” *MMWR*, Volume 69, September 9, 2020, <https://www.cdc.gov/mmwr/volumes/69/wr/pdfs/mm6937e2-H.pdf>.

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¹⁰ 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.

¹¹ 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>.

¹² FDA, “Modifications to Compliance Policy for Certain Deemed Products: Guidance for Industry, Draft Guidance,” March 13, 2019, <https://www.fda.gov/media/121384/download>.

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¹⁴ 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>.

¹⁵ 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>.

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