

Monitoring U.S. E-Cigarette Sales: National Trends

This brief report highlights trends in national e-cigarette sales from January 2017 to August 2021.

E-Cigarette Use

- The 2021 National Youth Tobacco Survey (NYTS) found that 11.3% (1.72 million) of high school and 2.8% (320,000) of middle school students were current e-cigarette users. 43.6% of high school current e-cigarette users reported using e-cigarettes frequently (on ≥20 of the past 30 days).
- Among current youth e-cigarette users, 84.7% used flavored e-cigarettes. In addition, more than half (53.7%) used disposable e-cigarettes and Puff Bar, a disposable e-cigarette, was the most commonly used brand (26.8%).

Federal Legislative and Regulatory Initiatives

- Flavors: The U.S. Food and Drug Administration issued an enforcement policy, effective February 2020, prohibiting the sale of flavored prefilled cartridges e-cigarettes, such as Juul and Vuse. This policy does not apply to tobacco-and menthol-flavored prefilled cartridges, e-liquids, or single use disposable products, such as Puff Bar and Mojo, which are available in a wide array of flavors.
- Sales Restrictions: On December 20, 2019, a federal law was passed to raise the minimum age of sale of tobacco products, including e-cigarettes, to 21 years.

Other Relevant Issues

- Between August 2019 and January 2020, federal, state, and local public health entities investigated a national outbreak of e-cigarette or vaping product use-associated lung injury (EVALI).
- Since March 2020, the coronavirus disease (COVID-19) pandemic has been affecting schools and businesses, including retail stores that sell ecigarettes.

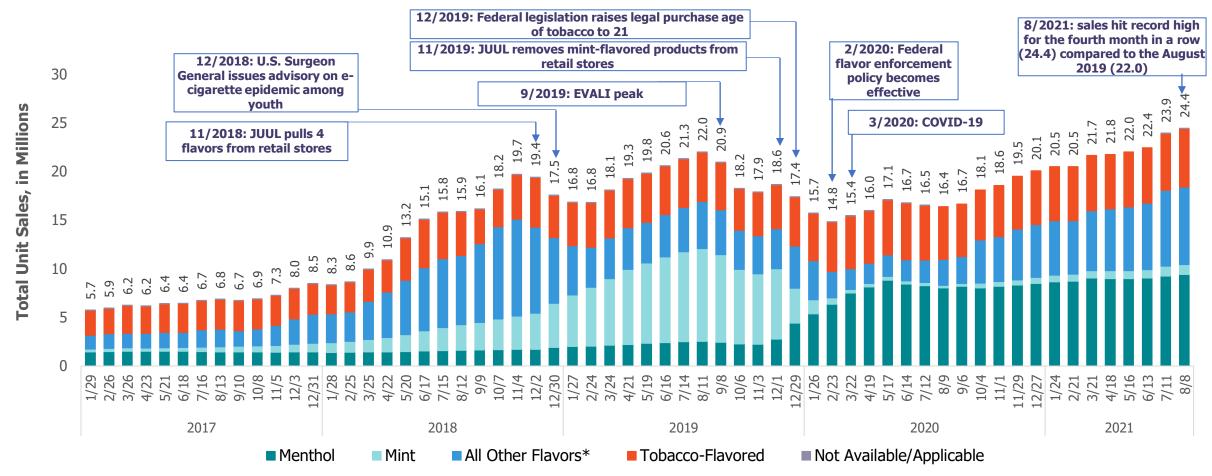
Key Findings

- Estimated national e-cigarette unit sales hit record high for the fourth month in a row, reaching 24.4 million units by August 8, 2021.
- Following FDA's flavor enforcement policy in February 2020, national total e-cigarette unit sales increased by 65.1% from February 23, 2020 to August 8, 2021.
- > As of August 8, 2021, all non-tobacco flavored e-cigarettes accounted for 75.3% of the national e-cigarette market, and menthol e-cigarette sales accounted for 38.4% of the market.
- The market shares of disposable e-cigarettes and menthol-flavored prefilled cartridges significantly increased in 2020, likely influenced by the federal enforcement policy that exempted these flavors and product types.

Conclusion: Restrictions that exempt certain flavors and product types are likely to shift sales to the products and flavors that remain on the market, deterring progress in reducing overall use. Comprehensive policies that prohibit all non-tobacco flavored e-cigarettes, including flavored disposable e-cigarettes, may reduce e-cigarette sales, reduce youth access to flavored e-cigarettes, and ultimately reduce youth e-cigarette use.

^{1.} Park-Lee E, Ren C, Sawdey MD, et al. Notes from the Field: E-Cigarette Use Among Middle and High School Students — National Youth Tobacco Survey, United States, 2021. MMWR Morb Mortal Wkly Rep 2021;70:1387—1389.

Figure 1. National E-Cigarette Unit Sales by Flavor, 4 Week Estimates 1/2017 – 8/2021*



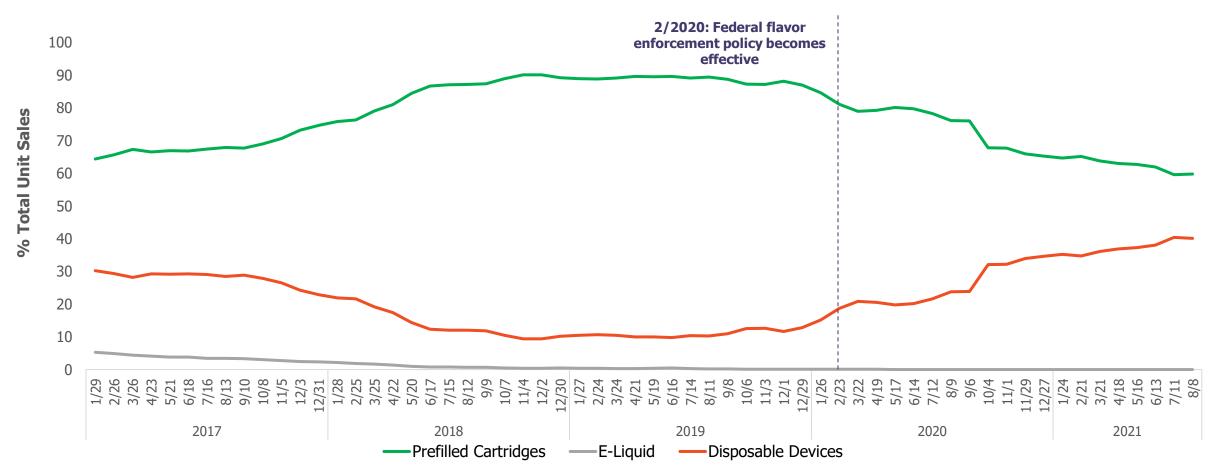
^{*}Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; All Other Flavors category includes fruit, clove/spice, chocolate, alcoholic drink (such as wine, cognac, or other cocktails), candy/desserts/other sweets, some other flavor; e-cigarette accessories and devices sold without e-liquids were excluded (11.5% of total sales).

Trends of Unit Sales by Flavor Following FDA's Flavor Enforcement Policy

- From February 23, 2020 to August 8, 2021, total monthly e-cigarette unit sales increased by 65.1% to 24.4 million units.
- From February 23, 2020 to August 8, 2021, sales of non-tobacco flavored e-cigarettes (mint, menthol and other flavors) increased by 89.4% (from 9.7 million to 18.4 million).
- From February 23, 2020 to August 8, 2021:
 - O Menthol-flavored e-cigarette sales increased by 47.7% (from 6.4 million to 9.4 million); market share decreased from 43.0% to 38.4%.
 - O Tobacco-flavored e-cigarette sales increased by 18.7% (from 5.1 million to 6.0 million); market share decreased from 34.3% to 24.7%.
 - O Mint-flavored e-cigarette sales increased by 55.7% (from 0.7 million to 1.0 million); market share decreased from 4.4% to 4.2%.
 - All other-flavored e-cigarette sales increased by 195.6% (from 2.7 million to 8.0 million); market share increased from 18.3% to 32.7%.



Figure 2. National E-Cigarette Unit Sales by Product Type, 4 Week Estimates 1/2017 – 8/2021*



^{*}Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; prefilled cartridges include tanks, cartridges, and pods used in rechargeable and reusable e-cigarette device; disposable devices include nonrechargeable and nonreusable e-cigarette devices that are not intended to be refilled with e-liquid after being depleted; e-liquids are containers of the liquid used in e-cigarette devices, which typically contains a humectant (e.g., propylene glycol), nicotine, and flavoring.

Trends of Unit Sales by Product Following FDA's Flavor Enforcement Policy

- Following FDA's flavor enforcement policy, which prohibited the sale of flavored prefilled cartridges but exempted disposable devices and menthol and tobacco prefilled cartridges, between February 23, 2020 and August 8, 2021:
 - Sales of disposable devices increased by 253.4% (from 2.8 million to 9.8 million); market share increased from 18.8% to 40.2%.
 - o Sales of prefilled cartridges increased by 21.8% (from 12.0 million to 14.6 million); market share decreased from 81.1% to 59.8%.



Figure 3. National E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates 1/2017 - 8/2021

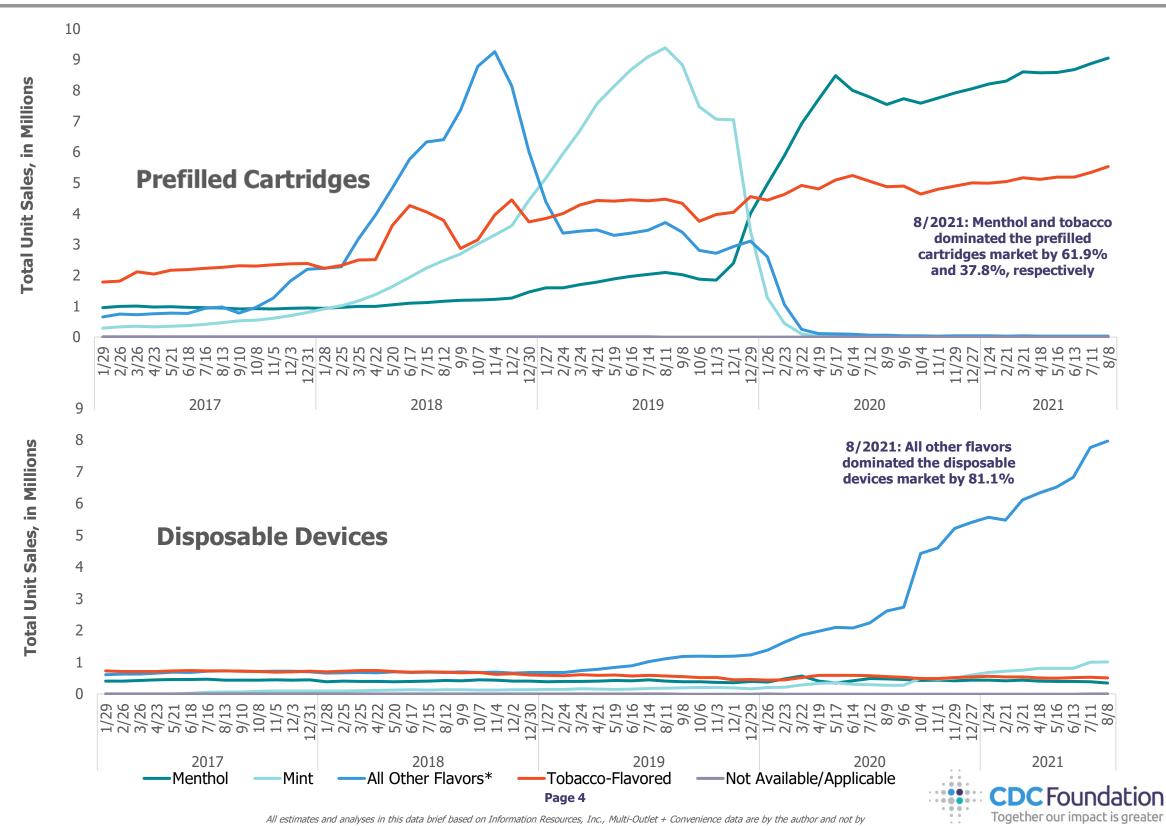


Figure 4. National E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates 1/2017 - 8/2021

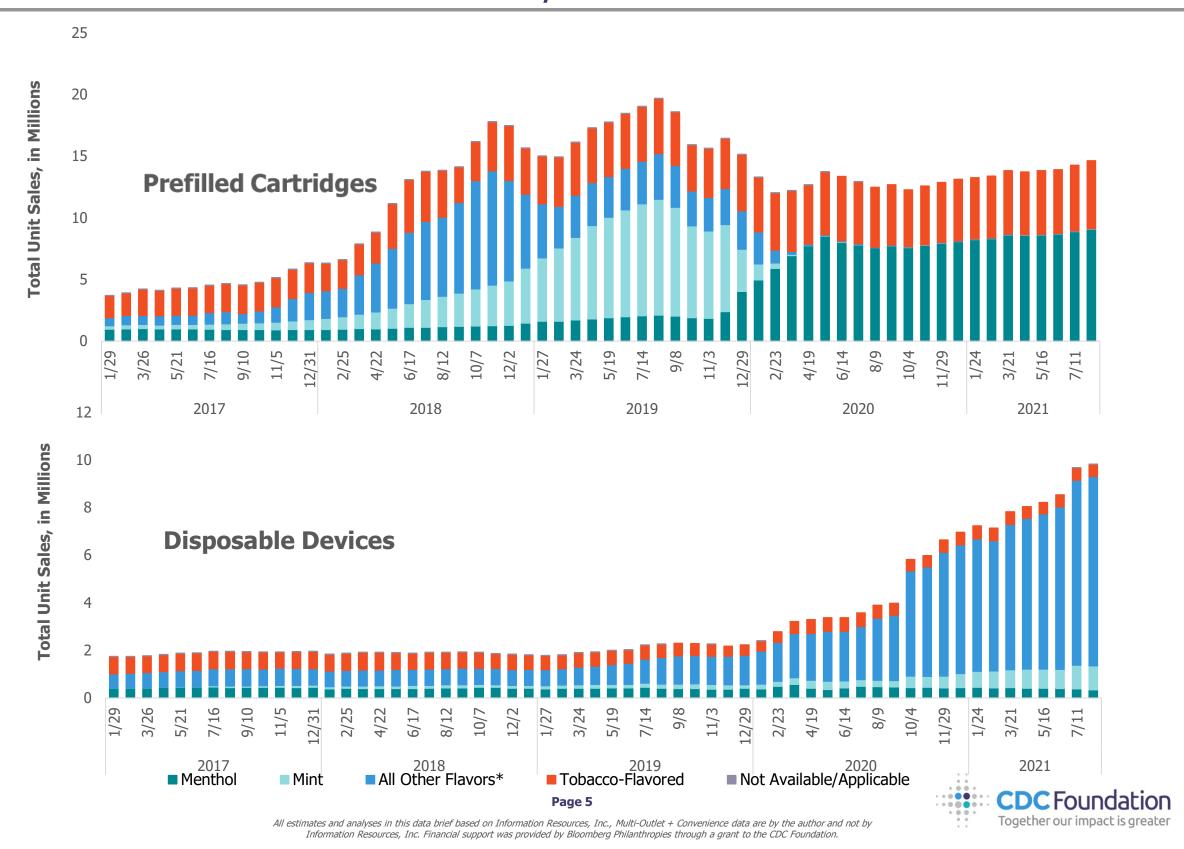
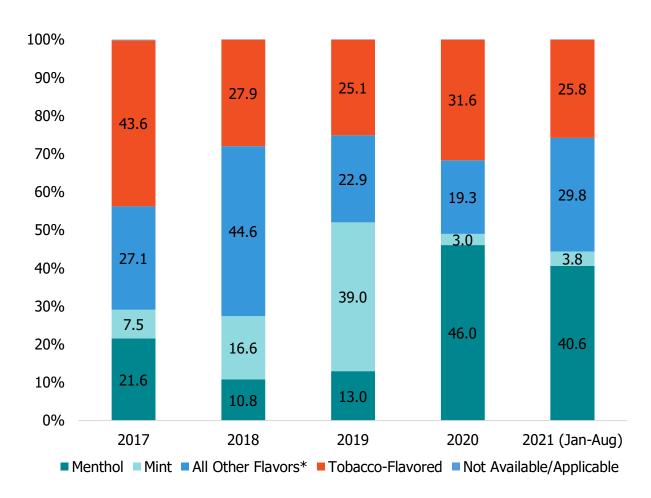


Figure 5 . Market Share of National E-Cigarette Unit Sales by Flavor, Annual Estimates 2017 - 8/2021*



^{*}Sales data does not reflect sales from vape shops or online retailers; dates for all years, except 2021, include sales from January through December; data for 2021 include sales from January through August; All Other Flavors category includes fruit, clove/spice, chocolate, alcoholic drink (such as wine, cognac, or other cocktails), candy/desserts/other sweets, some other flavor; ecigarette accessories and devices sold without e-liquids were excluded (11.5% of total sales).

Unit Sales Annual Trends by Flavor (2020-Aug 2021)

- From 2020 to Aug 2021:
 - Market share of menthol-flavored e-cigarette sales decreased from 46.0% to 40.6%;
 - O Market share of tobacco-flavored e-cigarette sales decreased from 31.6% to 25.8%;
 - Market share of mint-flavored e-cigarette sales increased from 3.0% to 3.8%; and
 - All other-flavored e-cigarette sales increased from 19.3% to 29.8%.

