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

This brief report highlights trends in national e-cigarette sales from January 2017 to February 2021. Please note this data brief has been updated since its original publication based on additional information that has become available for specific products. This version has been updated on 6/25/2021

• E-Cigarette Use
  • The 2020 National Youth Tobacco Survey (NYTS), released in September 2020, showed that current e-cigarette use was 19.6% among high school students and 4.7% among middle school students. Although these data show a decline since 2019 when e-cigarette use among youth peaked (at 27.5% and 10.5%, respectively), 3.6 million U.S. youth still currently used e-cigarettes in 2020, and more than 8 in 10 used flavored e-cigarettes.¹

• 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 e-cigarettes.

• State and Local Legislative Initiatives
  • As of March 2021, five states and over 300 local jurisdictions have enacted laws that prohibit sales of flavored tobacco products, including e-cigarettes

Key Findings

➢ Over the past year (February 23, 2020 - February 21, 2021), national total e-cigarette unit sales increased by 38.7%.
➢ Since the release of 2020 NYTS findings, e-cigarette sales increased by 23.1% between September 6, 2020 and February 21, 2021.
➢ As of February 21, 2021, all non-tobacco flavored e-cigarettes accounted for 72.9% of the national e-cigarette market, and menthol e-cigarette sales accounted for 42.4% 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 could shift sales to the flavors that remain on the market, deterring progress in reducing use. Comprehensive removal of flavors from the e-cigarette market may reduce e-cigarette sales, reduce youth access to flavored e-cigarettes, and ultimately reduce youth e-cigarette use.

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

<table>
<thead>
<tr>
<th>Flavor</th>
<th>Total Unit Sales, in Millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Menthol</td>
<td>11/2018: JUUL pulls 4 flavors from retail stores</td>
</tr>
<tr>
<td>Mint</td>
<td>12/2018: U.S. Surgeon General issues advisory on e-cigarette epidemic among youth</td>
</tr>
<tr>
<td>All Other Flavors*</td>
<td>11/2019: JUUL removes mint-flavored products from retail stores</td>
</tr>
<tr>
<td>Tobacco-Flavored</td>
<td>9/2019: EVALI peak</td>
</tr>
<tr>
<td>Not Available/Applicable</td>
<td>2/2020: Federal flavor enforcement policy becomes effective</td>
</tr>
<tr>
<td>Total</td>
<td>3/2020: COVID-19</td>
</tr>
</tbody>
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*Trends of Unit Sales by Flavor Following FDA’s Flavor Enforcement Policy

- From August 11, 2019 to February 23, 2020, monthly e-cigarette unit sales decreased by 32.7% to 14.8 million units.
- From February 23, 2020 to February 21, 2021, monthly e-cigarette unit sales increased by 38.7% to 20.5 million units.
  - Since the release of 2020 NYTS data, sales increased by 23.1% between September 6, 2020 and to February 21, 2021.
  - From February 23, 2020 to February 21, 2021:
    - Menthol-flavored e-cigarette sales increased by 37.0% (from 6.4 million to 8.7 million); market share decreased from 43.0% to 42.4%.
    - Tobacco-flavored e-cigarette sales increased by 9.6% (from 5.1 million to 5.6 million); market share decreased from 34.3% to 27.1%.
    - Mint-flavored e-cigarette sales increased by 11.3% (from 0.66 million to 0.73 million); market share decreased from 4.4% to 3.6%.
    - All other-flavored e-cigarette sales increased by 104.0% (from 2.7 million to 5.5 million); market share increased from 18.3% to 26.9%.
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, the market share of disposable devices increased from 18.8% to 34.8% of total sales between February 23, 2020 and February 21, 2021.
  - During this period, the market share of prefilled cartridges decreased from 81.1% to 65.2%.

- Since the release of 2020 NYTS findings, the market share of disposable devices increased from 23.9% in September 6, 2020 to 34.8% in February 21, 2021.
  - During this period, the market share of prefilled cartridges decreased from 76.1% to 65.2%.
Figure 3. National E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates 1/2017 – 2/2021
Figure 4. National E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates 1/2017 – 2/2021

Prefilled Cartridges

Disposable Devices