This data brief highlights trends in e-cigarette unit sales in selected states. Data is presented from January 2017 to September 2021.

**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 September 2021, four states (Massachusetts, New York, New Jersey, Rhode Island) prohibit the sale of all non-tobacco flavored e-cigarettes and two states (Maryland, Utah) restrict the sale of some flavored e-cigarettes. In addition, over 300 local jurisdictions have enacted laws that restrict the sale of flavored e-cigarettes.
- Local jurisdictions include cities (146), towns (160), unincorporated counties (14), full counties (5), tribes (3), and villages (1).
- More information about state and local policies can be found on the [Truth Initiative’s website](https://www.truthinitiative.org/).
States Presented in the Data Brief

[Map of the United States highlighting certain states in dark blue, indicating they are included in the data brief.]
Figure 1. California E-Cigarette Unit Sales by Flavor, 4 Week Estimates 1/2017 – 9/2021*

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

- From February 23, 2020 to September 5, 2021, monthly e-cigarette unit sales increased by 34.6% to 942.7 thousand units.
- From February 23, 2020 to September 5, 2021:
  - Menthol-flavored e-cigarette sales increased by 53.9% (from 226.4 thousand to 348.5 thousand); market share increased from 32.3% to 37.0%.
  - Tobacco-flavored e-cigarette sales increased by 9.5% (from 286.9 thousand to 314.1 thousand); market share decreased from 41.0% to 33.3%.
  - Mint-flavored e-cigarette sales decreased by 23.2% (from 53.2 thousand to 40.8 thousand); market share decreased from 7.6% to 4.3%.
  - All other-flavored e-cigarette sales increased by 77.7% (from 134.1 thousand to 238.2 thousand); market share increased from 19.1% to 25.3%.

*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).
Figure 2. California E-Cigarette Unit Sales by Product Type, 4 Week Estimates 1/2017 – 9/2021*

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 September 5, 2021:
  - Sales of disposable devices increased by 79.9% (from 172.8 thousand to 310.9 thousand); market share increased from 24.7% to 33.0%.
  - Sales of prefilled cartridges increased by 19.7% (from 527.6 thousand to 631.7 thousand); market share decreased from 75.3% to 67.0%.

*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.
Figure 3. California E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates 1/2017 – 9/2021

Prefilled Cartridges

Total Unit Sales, in Thousands

Disposable Devices

Total Unit Sales, in Thousands

Menthol
Mint
All Other Flavors*
Tobacco-Flavored
Not Available/Applicable
Figure 4. Colorado E-Cigarette Unit Sales by Flavor, 4 Week Estimates 1/2017 – 9/2021*

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

- From February 23, 2020 to September 5, 2021, monthly e-cigarette unit sales increased by 44.8% to 465.0 thousand units.
- From February 23, 2020 to September 5, 2021:
  - Menthol-flavored e-cigarette sales increased by 95.6% (from 142.2 thousand to 278.1 thousand); market share increased from 44.3% to 59.8%.
  - Tobacco-flavored e-cigarette sales decreased by 0.8% (from 124.1 thousand to 123.0 thousand); market share decreased from 38.7% to 26.5%.
  - Mint-flavored e-cigarette sales decreased by 50.6% (from 7.7 thousand to 3.8 thousand); market share decreased from 2.4% to 0.8%.
  - All other-flavored e-cigarette sales increased by 27.7% (from 47.0 thousand to 60.0 thousand); market share decreased from 14.6% to 12.9%.

*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).
Figure 5. Colorado E-Cigarette Unit Sales by Product Type, 4 Week Estimates 1/2017 – 9/2021*

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 September 5, 2021:

- Sales of disposable devices increased by 165.8% (from 30.6 thousand to 81.3 thousand); market share increased from 9.5% to 17.5%.
- Sales of prefilled cartridges increased by 32.1% (from 290.4 thousand to 383.7 thousand); market share decreased from 90.5% to 82.5%.

*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.
Figure 6. Colorado E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates 1/2017 – 9/2021
Trends of Unit Sales by Flavor Following FDA’s Flavor Enforcement Policy

- From February 23, 2020 to September 5, 2021, monthly e-cigarette unit sales increased by 8.0% to 347.5 thousand units.
- From February 23, 2020 to September 5, 2021:
  - Menthol-flavored e-cigarette sales increased by 58.9% (from 113.2 thousand to 180.0 thousand); market share increased from 35.2% to 51.8%.
  - Tobacco-flavored e-cigarette sales increased by 24.4% (from 66.1 thousand to 82.2 thousand); market share increased from 20.5% to 23.7%.
  - Mint-flavored e-cigarette sales decreased by 29.8% (from 27.5 thousand to 19.3 thousand); market share decreased from 8.5% to 5.6%.
  - All other-flavored e-cigarette sales decreased by 42.7% (from 115.0 thousand to 65.9 thousand); market share decreased from 35.7% to 19.0%.
Figure 8. Connecticut E-Cigarette Unit Sales by Product Type, 4 Week Estimates 1/2017 – 9/2021*

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 September 5, 2021:
  - Sales of disposable devices decreased by 9.9% (from 98.8 thousand to 89.1 thousand); market share decreased from 30.7% to 25.6%.
  - Sales of prefilled cartridges increased by 15.9% (from 222.9 thousand to 258.4 thousand); market share increased from 69.2% to 74.4%.

*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.
Figure 9. Connecticut E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates 1/2017 – 9/2021

Prefilled Cartridges

Disposable Devices

Total Unit Sales, in Thousands

2017 2018 2019 2020 2021

Menthol Mint All Other Flavors* Tobacco-Flavored Not Available/Applicable
Figure 10. Illinois E-Cigarette Unit Sales by Flavor, 4 Week Estimates 1/2017 – 9/2021*

**Trends of Unit Sales by Flavor Following FDA’s Flavor Enforcement Policy**

- From February 23, 2020 to September 5, 2021, monthly e-cigarette unit sales decreased by 14.7% to 869.5 thousand units.
- From February 23, 2020 to September 5, 2021:
  - Menthol-flavored e-cigarette sales increased by 4.4% (from 305.6 thousand to 319.2 thousand); market share decreased from 40.3% to 36.7%.
  - Tobacco-flavored e-cigarette sales decreased by 21.7% (from 233.5 thousand to 182.9 thousand); market share decreased from 30.8% to 21.0%.
  - Mint-flavored e-cigarette sales increased by 264.4% (from 23.1 thousand to 84.0 thousand); market share increased from 3.0% to 9.7%.
  - All other-flavored e-cigarette sales increased by 44.7% (from 195.9 thousand to 283.4 thousand); market share increased from 25.8% to 32.6%.

*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).
**Figure 11. Illinois E-Cigarette Unit Sales by Product Type, 4 Week Estimates 1/2017 – 9/2021***

*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 September 5, 2021:
  - Sales of disposable devices increased by 41.0% (from 288.3 thousand to 406.5 thousand); market share increased from 38.0% to 46.8%.
  - Sales of prefilled cartridges decreased by 1.3% (from 468.9 thousand to 463.0 thousand); market share decreased from 61.9% to 53.2%.

*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.
Figure 12. Illinois E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates 1/2017 – 9/2021

Prefilled Cartridges

Disposable Devices

Total Unit Sales, in Thousands

2017 2018 2019 2020 2021

- Menthol
- Mint
- All Other Flavors*
- Tobacco-Flavored
- Not Available/Applicable

All estimates and analyses in this data brief based on Information Resources, Inc., Multi-Outlet + Convenience data are by the author and not by Information Resources, Inc. Financial support was provided by Bloomberg Philanthropies through a grant to the CDC Foundation.
Trends of Unit Sales by Flavor Following FDA’s Flavor Enforcement Policy

- From February 23, 2020 to September 5, 2021, monthly e-cigarette unit sales increased by 82.1% to 147.0 thousand units.
- From February 23, 2020 to September 5, 2021:
  - Menthol-flavored e-cigarette sales increased by 143.9% (from 42.0 thousand to 102.5 thousand); market share increased from 52.1% to 69.7%.
  - Tobacco-flavored e-cigarette sales increased by 31.7% (from 24.9 thousand to 32.7 thousand); market share decreased from 30.8% to 22.3%.
  - Mint-flavored e-cigarette sales increased by 63.2% (from 0.9 thousand to 1.5 thousand); market share decreased from 1.1% to 1.0%.
  - All other-flavored e-cigarette sales decreased by 20.7% (from 13.0 thousand to 10.3 thousand); market share decreased from 16.0% to 7.0%.
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 September 5, 2021:
  - Sales of disposable devices increased by 109.8% (from 7.3 thousand to 15.4 thousand); market share decreased from 9.1% to 10.5%.
  - Sales of prefilled cartridges increased by 79.3% (from 73.4 thousand to 131.6 thousand); market share increased from 90.9% to 89.5%.
Figure 15. Maine E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates 1/2017 – 9/2021
Figure 16. Maryland E-Cigarette Unit Sales by Flavor, 4 Week Estimates 1/2017 – 9/2021*

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

- From February 23, 2020 to September 5, 2021, monthly e-cigarette unit sales increased by 11.6% to 242.3 thousand units.
- From February 23, 2020 to September 5, 2021:
  - Menthol-flavored e-cigarette sales increased by 58.0% (from 114.6 thousand to 181.1 thousand); market share increased from 52.8% to 74.7%.
  - Tobacco-flavored e-cigarette sales decreased by 12.0% (from 68.5 thousand to 60.3 thousand); market share decreased from 31.6% to 24.9%.
  - Mint-flavored e-cigarette sales decreased by 98.9% (from 9.1 thousand to 0.1 thousand); market share decreased from 4.2% to 0.0%.
  - All other-flavored e-cigarette sales decreased by 96.9% (from 24.9 thousand to 0.8 thousand); market share decreased from 11.5% to 0.3%.
Figure 17. Maryland E-Cigarette Unit Sales by Product Type, 4 Week Estimates 1/2017 – 9/2021*

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 September 5, 2021:
  - Sales of disposable devices decreased by 45.1% (from 20.9 thousand to 11.5 thousand); market share decreased from 9.6% to 4.7%.
  - Sales of prefilled cartridges increased by 17.6% (from 196.3 thousand to 230.9 thousand); market share increased from 90.4% to 95.3%.

*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.
Figure 18. Maryland E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates 1/2017 – 9/2021
Trends of Unit Sales by Flavor (9/8/19-9/5/21)

- Following Massachusetts's flavored e-cigarette restrictions, monthly e-cigarette total unit sales decreased by 78.8% from September 8, 2019 to September 5, 2021 (from 645.2 thousand to 136.8 thousand).

- From September 8, 2019 to September 5, 2021:
  - Menthol-flavored e-cigarette sales decreased by 99.1% (from 55.3 thousand to 0.5 thousand); market share decreased from 8.6% to 0.3%.
  - Tobacco-flavored e-cigarette sales decreased by 19.9% (from 169.0 thousand to 135.4 thousand); market share increased from 26.2% to 99.0%.
  - Mint-flavored e-cigarette sales decreased by 100.0% (from 370.4 thousand to 0.2 thousand); market share decreased from 57.4% to 0.1%.
  - All other-flavored e-cigarette sales decreased by 98.5% (from 50.6 thousand to 0.7 thousand); market share decreased from 7.8% to 0.5%.
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 September 5, 2021:
  - Sales of disposable devices increased by 186.2% (from 5.2 thousand to 14.8 thousand); market share increased from 10.7% to 10.8%.
  - Sales of prefilled cartridges increased by 183.6% (from 43.0 thousand to 122.0 thousand); market share decreased from 89.3% to 89.2%.
Figure 21. Massachusetts E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates 1/2017 – 9/2021
Figure 22. New Hampshire E-Cigarette Unit Sales by Flavor, 4 Week Estimates 1/2017 – 9/2021*

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

- From February 23, 2020 to September 5, 2021, monthly e-cigarette unit sales increased by 39.7% to 209.9 thousand units.
- From February 23, 2020 to September 5, 2021:
  - Menthol-flavored e-cigarette sales increased by 72.1% (from 75.5 thousand to 129.9 thousand); market share increased from 50.3% to 61.9%.
  - Tobacco-flavored e-cigarette sales increased by 22.6% (from 49.4 thousand to 60.6 thousand); market share decreased from 32.9% to 28.9%.
  - Mint-flavored e-cigarette sales increased by 5.2% (from 10.6 thousand to 11.2 thousand); market share decreased from 7.1% to 5.3%.
  - All other-flavored e-cigarette sales decreased by 44.3% (from 14.6 thousand to 8.2 thousand); market share decreased from 9.7% to 3.9%.

*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 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 September 5, 2021:
  - Sales of disposable devices increased by 91.8% (from 13.9 thousand to 26.7 thousand); market share increased from 9.3% to 12.7%.
  - Sales of prefilled cartridges increased by 34.4% (from 136.3 thousand to 183.2 thousand); market share decreased from 90.7% to 87.3%.
Figure 25. New York E-Cigarette Unit Sales by Flavor, 4 Week Estimates 1/2017 – 9/2021*

Trends of Unit Sales by Flavor (5/17/20-9/5/21)
• Following New York's flavored e-cigarette restriction, monthly e-cigarette total unit sales decreased by 30.3% between May 17, 2020 and September 5, 2021 (from 1594.0 thousand to 1111.2 thousand).
• From May 17, 2020 to September 5, 2021:
  ○ Menthol-flavored e-cigarette sales decreased by 96.8% (from 770.3 thousand to 24.4 thousand); market share decreased from 48.3% to 2.2%.
  ○ Tobacco-flavored e-cigarette sales increased by 67.4% (from 592.1 thousand to 991.1 thousand); market share increased from 37.1% to 89.2%.
  ○ Mint-flavored e-cigarette sales decreased by 82.5% (from 52.5 thousand to 9.2 thousand); market share decreased from 3.3% to 0.8%.
  ○ All other-flavored e-cigarette sales decreased by 51.7% (from 179.1 thousand to 86.5 thousand); market share decreased from 11.2% to 7.8%.

*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).
Figure 26. New York E-Cigarette Unit Sales by Product Type, 4 Week Estimates 1/2017 – 9/2021*

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 September 5, 2021:
  - Sales of disposable devices decreased by 26.6% (from 237.4 thousand to 174.3 thousand); market share decreased from 19.5% to 15.7%.
  - Sales of prefilled cartridges decreased by 4.6% (from 982.3 thousand to 936.9 thousand); market share increased from 80.5% to 84.3%.

*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 devices; 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.
Figure 27. New York E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates 1/2017 – 9/2021

Prefilled Cartridges

Disposable Devices

Total Unit Sales, in Thousands

Menthol
Mint
All Other Flavors*
Tobacco-Flavored
Not Available/Applicable
Figure 28. Oregon E-Cigarette Unit Sales by Flavor, 4 Week Estimates 1/2017 – 9/2021*

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

- From February 23, 2020 to September 5, 2021, monthly e-cigarette unit sales increased by 27.2% to 226.8 thousand units.
- From February 23, 2020 to September 5, 2021:
  - Menthol-flavored e-cigarette sales increased by 47.8% (from 90.9 thousand to 134.4 thousand); market share increased from 51.0% to 59.3%.
  - Tobacco-flavored e-cigarette sales decreased by 7.0% (from 63.0 thousand to 58.6 thousand); market share decreased from 35.3% to 25.8%.
  - Mint-flavored e-cigarette sales decreased by 82.8% (from 10.9 thousand to 1.9 thousand); market share decreased from 6.1% to 0.8%.
  - All other-flavored e-cigarette sales increased by 136.5% (from 13.4 thousand to 31.7 thousand); market share increased from 7.5% to 14.0%.

*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 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 September 5, 2021:
  - Sales of disposable devices increased by 600.9% (from 5.3 thousand to 37.4 thousand); market share increased from 3.0% to 16.5%.
  - Sales of prefilled cartridges increased by 9.5% (from 172.8 thousand to 189.2 thousand); market share decreased from 96.9% to 83.4%.

*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.
Figure 30. Oregon E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates 1/2017 – 9/2021

Prefilled Cartridges

Disposable Devices

All estimates and analyses in this data brief based on Information Resources, Inc., Multi-Outlet + Convenience data are by the author and not by Information Resources, Inc. Financial support was provided by Bloomberg Philanthropies through a grant to the CDC Foundation.
Figure 31. Rhode Island E-Cigarette Unit Sales by Flavor, 4 Week Estimates 1/2017 – 9/2021*

Trends of Unit Sales by Flavor (10/6/19-9/5/21)

- Following Rhode Island’s flavored e-cigarette restriction, monthly e-cigarette total unit sales decreased by 29.9% from October 6, 2019 to September 5, 2021 (from 119.0 thousand to 83.4 thousand).
- From October 06, 2019 to September 5, 2021:
  - Menthol-flavored e-cigarette sales decreased by 99.8% (from 14.3 thousand to 0.0 thousand); market share decreased from 12.0% to 0.0%.
  - Tobacco-flavored e-cigarette sales increased by 141.4% (from 34.3 thousand to 82.8 thousand); market share increased from 28.8% to 99.3%.
  - Mint-flavored e-cigarette sales decreased by 99.8% (from 51.8 thousand to 0.1 thousand); market share decreased from 43.5% to 0.1%.
  - All other-flavored e-cigarette sales decreased by 97.6% (from 18.6 thousand to 0.5 thousand); market share decreased from 15.6% to 0.5%.

*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).
Figure 32. Rhode Island E-Cigarette Unit Sales by Product Type, 4 Week Estimates 1/2017 – 9/2021*

- 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 September 5, 2021:
  - Sales of disposable devices decreased by 2.0% (from 7.9 thousand to 7.7 thousand); market share decreased from 9.5% to 9.3%.
  - Sales of prefilled cartridges increased by 0.6% (from 75.2 thousand to 75.7 thousand); market share increased from 90.5% to 90.7%.
Figure 33. Rhode Island E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates 1/2017 – 9/2021
Figure 34. Utah E-Cigarette Unit Sales by Flavor, 4 Week Estimates 1/2017 – 9/2021*

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

- From February 23, 2020 to September 5, 2021, monthly e-cigarette unit sales increased by 8.9% to 118.2 thousand units.
- From February 23, 2020 to September 5, 2021:
  - Menthol-flavored e-cigarette sales increased by 84.6% (from 41.9 thousand to 77.4 thousand); market share increased from 38.6% to 65.5%.
  - Tobacco-flavored e-cigarette sales decreased by 33.6% (from 55.9 thousand to 37.2 thousand); market share decreased from 51.6% to 31.4%.
  - Mint-flavored e-cigarette sales increased by 8.8% (from 1.8 thousand to 2.0 thousand); market share decreased from 1.654% to 1.652%.
  - All other-flavored e-cigarette sales decreased by 81.1% (from 8.8 thousand to 1.7 thousand); market share decreased from 8.2% to 1.4%.

*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).
Figure 35. Utah E-Cigarette Unit Sales by Product Type, 4 Week Estimates 1/2017 – 9/2021*

**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 September 5, 2021:
  - Sales of disposable devices decreased by 1.1% (from 6.8 thousand to 6.7 thousand); market share decreased from 6.3% to 5.7%.
  - Sales of prefilled cartridges increased by 9.7% (from 101.6 thousand to 111.4 thousand); market share increased from 93.7% to 94.3%.

*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.
Figure 36. Utah E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates 1/2017 – 9/2021

Prefilled Cartridges

Disposable Devices

[Menthol] [Mint] [All Other Flavors*] [Tobacco-Flavored] [Not Available/Applicable]
Figure 37. Washington E-Cigarette Unit Sales by Flavor, 4 Week Estimates 1/2017 – 9/2021*

Trends of Unit Sales by Flavor (10/6/19 - 01/26/20)
- Following Washington's flavored e-cigarette restriction, monthly e-cigarette total unit sales decreased by 25.8% from October 6, 2019 to January 26, 2020 (from 214.0 thousand to 158.7 thousand).

Trends of Unit Sales by Flavor (02/23/20 - 9/5/21)
- Monthly e-cigarette total unit sales increased by 95.1% from February 23, 2020 to September 5, 2021 (from 167.2 thousand to 326.1 thousand).
- From February 23, 2020 to September 5, 2021:
  - Menthol-flavored e-cigarette sales increased by 819.8% (from 18.0 thousand to 165.1 thousand); market share increased from 10.7% to 50.6%.
  - Tobacco-flavored e-cigarette sales decreased by 30.0% (from 148.0 thousand to 103.6 thousand); market share decreased from 88.5% to 31.8%.
  - Mint-flavored e-cigarette sales increased by 538.9% (from 0.5 thousand to 3.2 thousand); market share increased from 0.3% to 1.0%.
  - All other-flavored e-cigarette sales increased by 7611.8% (from 0.7 thousand to 54.2 thousand); market share increased from 0.4% to 16.6%.

*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 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 September 5, 2021:
  - Sales of disposable devices increased by 748.9% (from 7.4 thousand to 62.8 thousand); market share increased from 4.4% to 19.2%.
  - Sales of prefilled cartridges increased by 64.9% (from 159.8 thousand to 263.4 thousand); market share increased from 95.6% to 80.8%.

*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.
Figure 39. Washington E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates 1/2017 – 9/2021

Prefilled Cartridges

Total Unit Sales, in Thousands

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Unit Sales, in Thousands</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
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<td>2018</td>
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<td>2019</td>
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</tr>
<tr>
<td>2020</td>
<td>716</td>
</tr>
<tr>
<td>2021</td>
<td>910</td>
</tr>
</tbody>
</table>

Disposable Devices

Total Unit Sales, in Thousands

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Unit Sales, in Thousands</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
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<tr>
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</tr>
<tr>
<td>2020</td>
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</tr>
<tr>
<td>2021</td>
<td>419</td>
</tr>
</tbody>
</table>

*All Other Flavors

Menthol | Mint | Tobacco-Flavored | Not Available/Applicable

All estimates and analyses in this data brief based on Information Resources, Inc., Multi-Outlet + Convenience data are by the author and not by Information Resources, Inc. Financial support was provided by Bloomberg Philanthropies through a grant to the CDC Foundation.