

# Monitoring U.S. E-Cigarette Sales: State Trends

## This data brief highlights trends in e-cigarette unit sales in selected states. Data is presented from January 2018 through March 2022.

#### Federal Flavor Regulatory Initiatives

- The U.S. Food and Drug Administration (FDA) issued an enforcement policy, effective February 2020, prohibiting the sale of flavored prefilled cartridges e-cigarettes, which does not apply to tobacco-and *menthol-flavored prefilled cartridges*, e-liquids, or single use *disposable products*.
- FDA began issuing marketing denial orders for flavored e-cigarette products leading up to the court-ordered deadline of September 9, 2021 to rule on product applications. However, the FDA has yet to rule on products with over 75% of the e-cigarette market.

#### 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 2022, 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 <u>Truth Initiative's website</u>.



## **States Presented in the Data Brief**

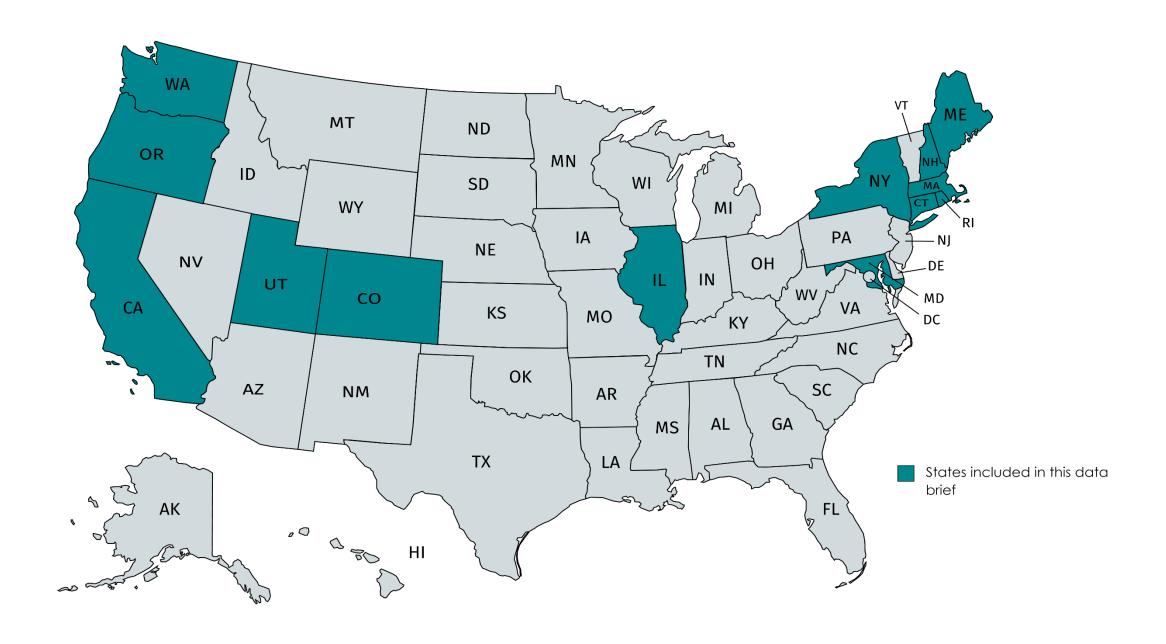
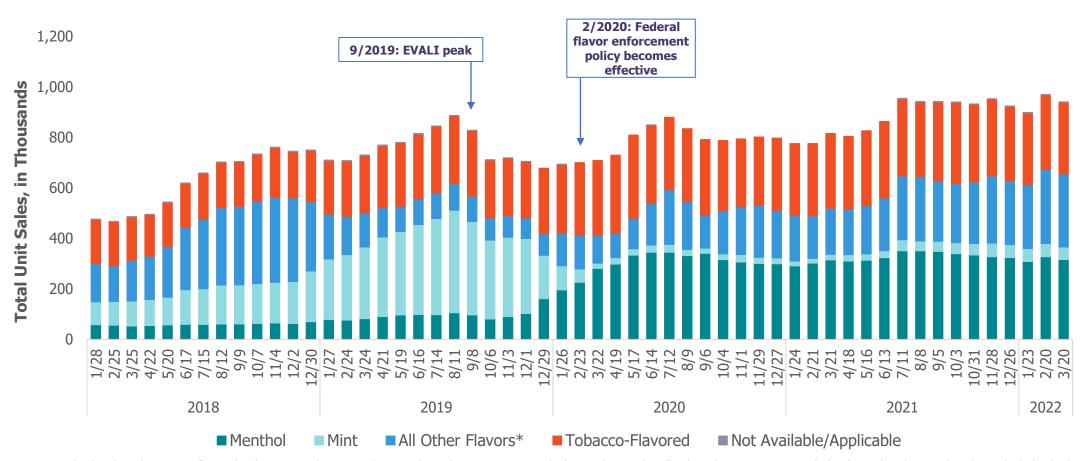


Figure 1. California E-Cigarette Unit Sales by Flavor, 4 Week Estimates 1/2018 – 3/2022\*

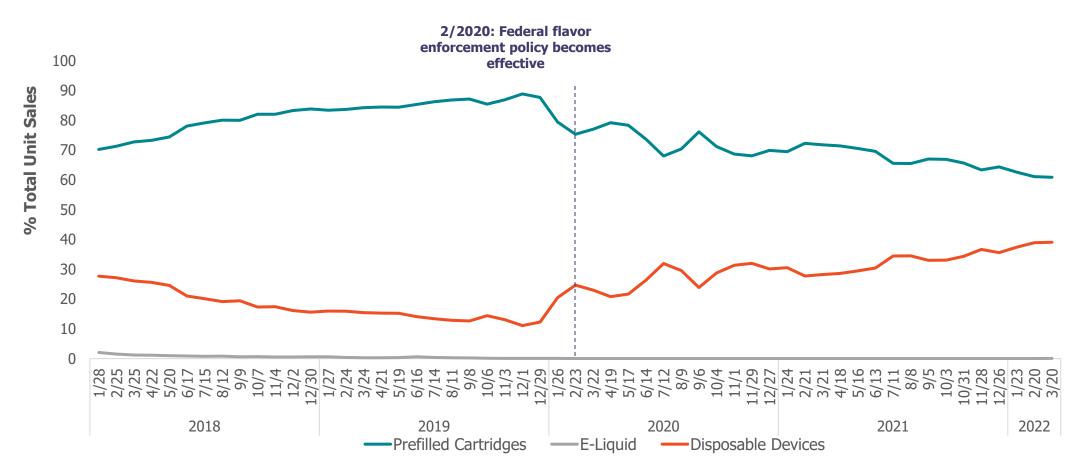


<sup>\*</sup>Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; All Other Flavors category includes fruit, clove/spice, chocolate, alcoholic drink (such as wine, cognac, or other cocktails), candy/desserts/other sweets, some other flavor; e-cigarette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

- From February 23, 2020 to March 20, 2022, monthly e-cigarette unit sales increased by 34.3% to 940.9 thousand units.
- From February 23, 2020 to March 20, 2022:
  - O Menthol-flavored e-cigarette sales increased by 39.6% (from 226.4 thousand to 316.1 thousand); market share increased from 32.3% to 33.6%.
  - O Tobacco-flavored e-cigarette sales decreased by 0.8% (from 286.9 thousand to 284.5 thousand); market share decreased from 41.0% to 30.2%.
  - O Mint-flavored e-cigarette sales decreased by 5.2% (from 53.2 thousand to 50.4 thousand); market share decreased from 7.6% to 5.4%.
  - O All other-flavored e-cigarette sales increased by 115.7% (from 134.1 thousand to 289.2 thousand); market share increased from 19.1% to 30.7%.



Figure 2. California E-Cigarette Unit Sales by Product Type, 4 Week Estimates 1/2018 – 3/2022\*



<sup>\*</sup>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.

- 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 March 20, 2022:
  - o Sales of disposable devices increased by 112.7% (from 172.8 thousand to 367.5 thousand); market share increased from 24.7% to 39.1%.
  - o Sales of prefilled cartridges increased by 8.5% (from 527.6 thousand to 572.7 thousand); market share decreased from 75.3% to 60.9%.



Figure 3. California E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates 1/2018 – 3/2022

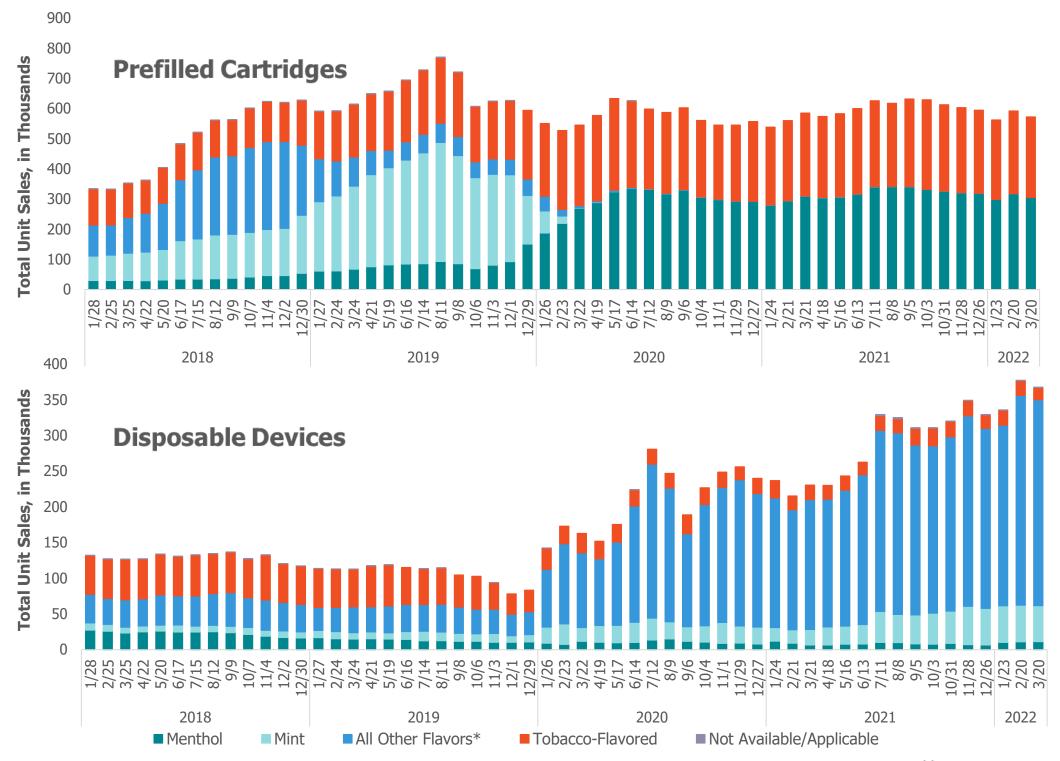
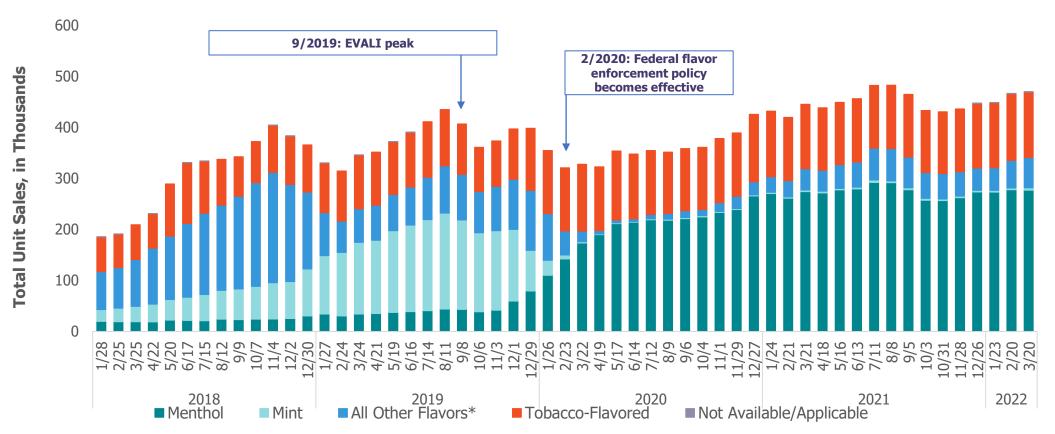


Figure 4. Colorado E-Cigarette Unit Sales by Flavor, 4 Week Estimates 1/2018 – 3/2022\*

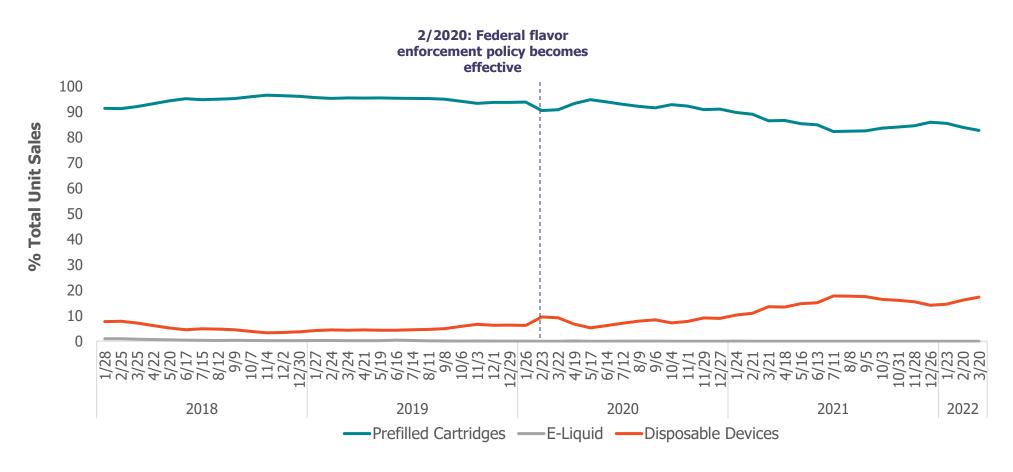


\*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; All Other Flavors category includes fruit, clove/spice, chocolate, alcoholic drink (such as wine, cognac, or other cocktails), candy/desserts/other sweets, some other flavor; e-cigarette accessories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

- From February 23, 2020 to March 20, 2022, monthly e-cigarette unit sales increased by 46.5% to 470.3 thousand units.
- From February 23, 2020 to March 20, 2022:
  - O Menthol-flavored e-cigarette sales increased by 94.9% (from 142.2 thousand to 277.1 thousand); market share increased from 44.3% to 58.9%.
  - O Tobacco-flavored e-cigarette sales increased by 3.7% (from 124.1 thousand to 128.7 thousand); market share decreased from 38.7% to 27.4%.
  - O Mint-flavored e-cigarette sales decreased by 39.6% (from 7.7 thousand to 4.7 thousand); market share decreased from 2.4% to 1.0%.
  - All other-flavored e-cigarette sales increased by 26.1% (from 47.0 thousand to 59.3 thousand); market share decreased from 14.6% to 12.6%.



Figure 5. Colorado E-Cigarette Unit Sales by Product Type, 4 Week Estimates 1/2018 – 3/2022\*



<sup>\*</sup>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.

- 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 March 20, 2022:
  - Sales of disposable devices increased by 166.5% (from 30.6 thousand to 81.5 thousand); market share increased from 9.5% to 17.3%.
  - Sales of prefilled cartridges increased by 33.9% (from 290.4 thousand to 388.8 thousand); market share decreased from 90.5% to 82.7%.



Figure 6. Colorado E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates 1/2018 – 3/2022

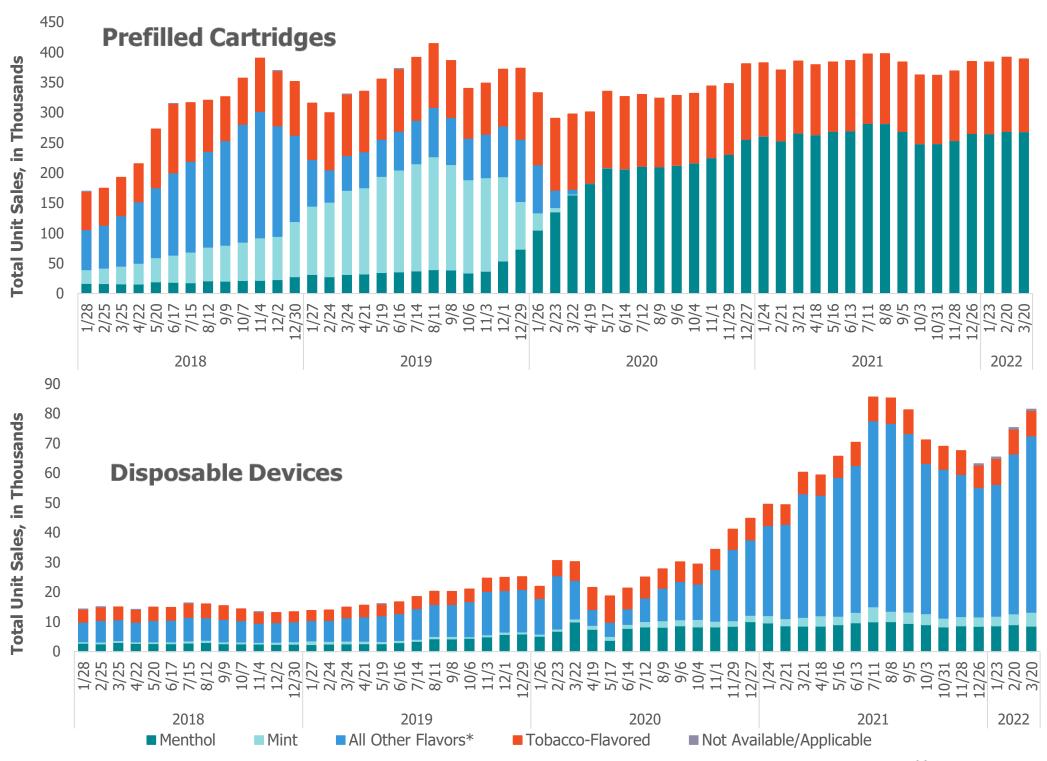
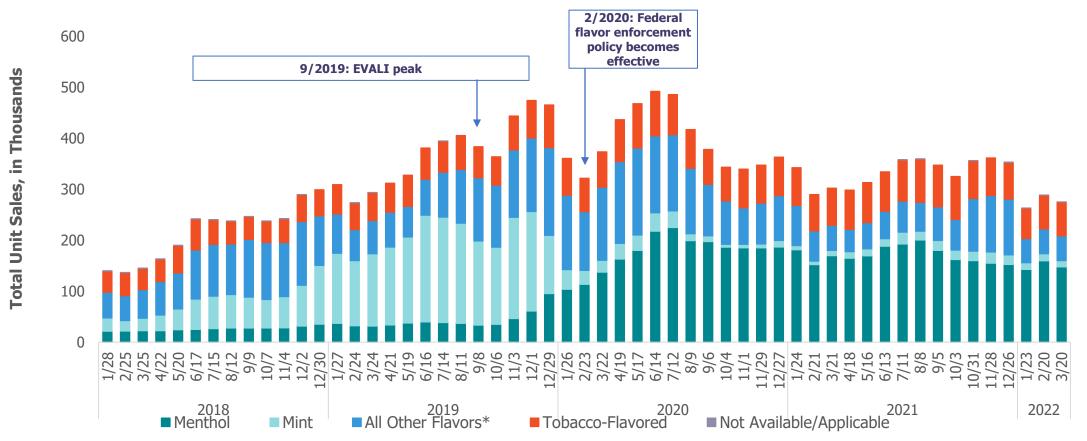


Figure 7. Connecticut E-Cigarette Unit Sales by Flavor, 4 Week Estimates 1/2018 – 3/2022\*

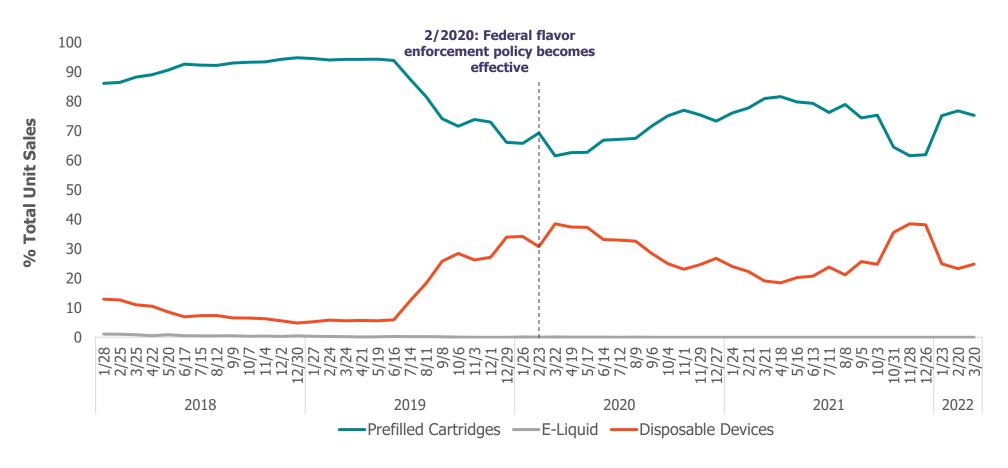


<sup>\*</sup>Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; All Other Flavors category includes fruit, clove/spice, chocolate, alcoholic drink (such as wine, cognac, or other cocktails), candy/desserts/other sweets, some other flavor; e-cigarette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

- From February 23, 2020 to March 20, 2022, monthly e-cigarette unit sales decreased by 14.5% to 275.2 thousand units.
- From February 23, 2020 to March 20, 2022:
  - O Menthol-flavored e-cigarette sales increased by 30.4% (from 113.2 thousand to 147.6 thousand); market share increased from 35.2% to 53.6%.
  - O Tobacco-flavored e-cigarette sales increased by 0.7% (from 66.1 thousand to 66.5 thousand); market share increased from 20.5% to 24.2%.
  - Mint-flavored e-cigarette sales decreased by 55.4% (from 27.5 thousand to 12.3 thousand); market share decreased from 8.5% to 4.5%.
  - All other-flavored e-cigarette sales decreased by 57.7% (from 115.0 thousand to 48.7 thousand); market share decreased from 35.7% to 17.7%.



Figure 8. Connecticut E-Cigarette Unit Sales by Product Type, 4 Week Estimates 1/2018 – 3/2022\*



<sup>\*</sup>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.

- 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 March 20, 2022:
  - Sales of disposable devices decreased by 31.0% (from 98.8 thousand to 68.2 thousand); market share decreased from 30.7% to 24.8%.
  - Sales of prefilled cartridges decreased by 7.1% (from 222.9 thousand to 207.0 thousand); market share increased from 69.2% to 75.2%.



Figure 9. Connecticut E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates 1/2018 – 3/2022

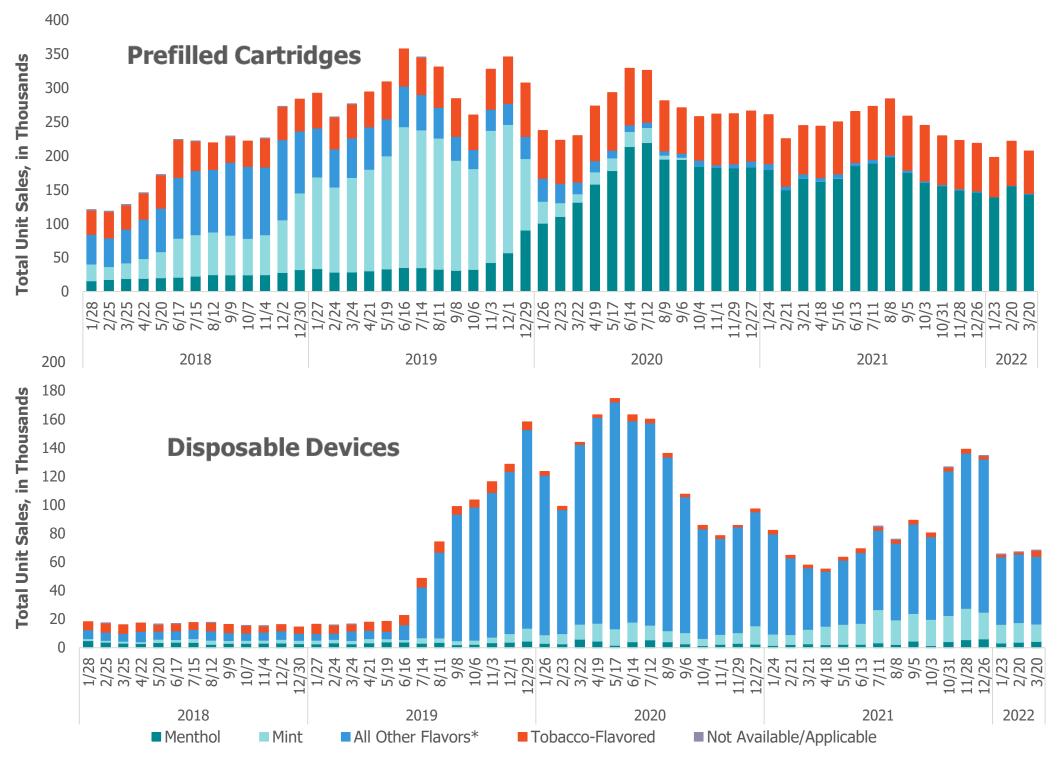
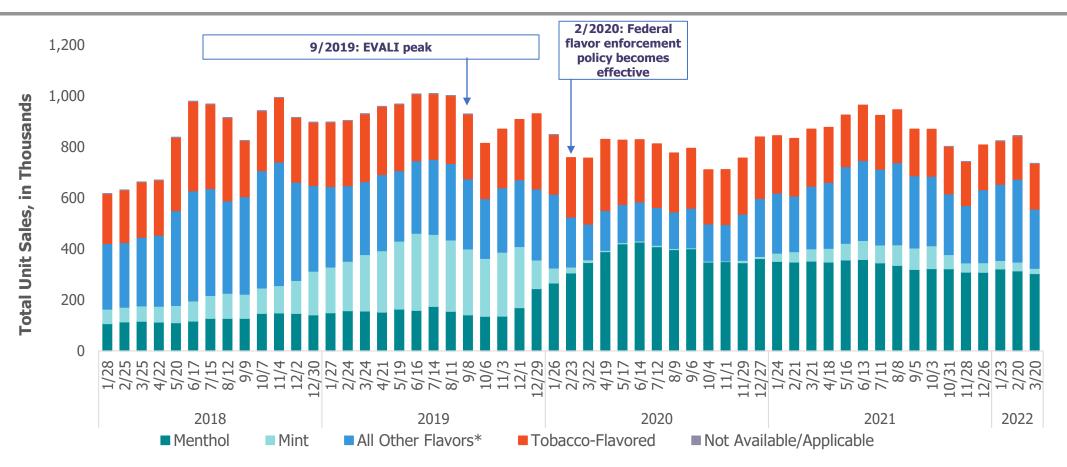


Figure 10. Illinois E-Cigarette Unit Sales by Flavor, 4 Week Estimates 1/2018 – 3/2022\*

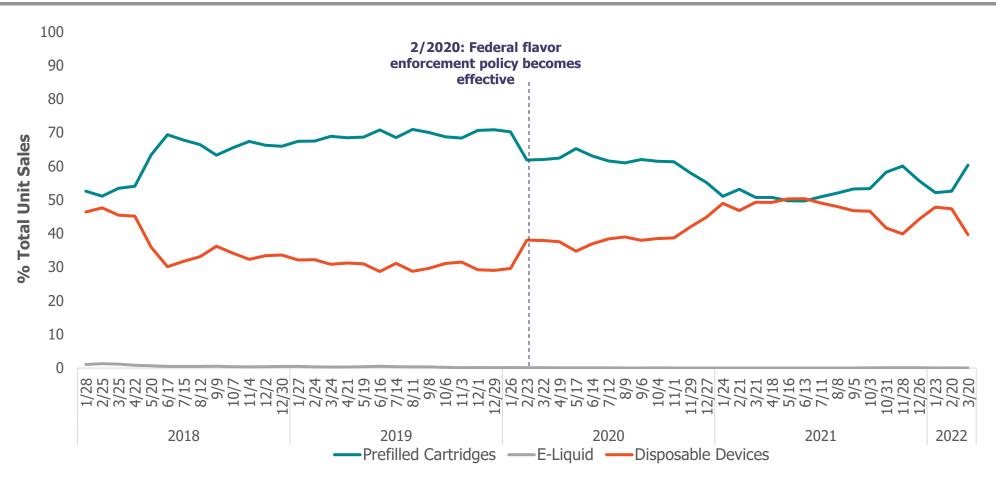


\*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; All Other Flavors category includes fruit, clove/spice, chocolate, alcoholic drink (such as wine, cognac, or other cocktails), candy/desserts/other sweets, some other flavor; e-cigarette accessories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

- From February 23, 2020 to March 20, 2022, monthly e-cigarette unit sales decreased by 3.0% to 735.0 thousand units.
- From February 23, 2020 to March 20, 2022:
  - O Menthol-flavored e-cigarette sales decreased by 0.9% (from 305.6 thousand to 302.9 thousand); market share increased from 40.3% to 41.2%.
  - O Tobacco-flavored e-cigarette sales decreased by 23.5% (from 233.5 thousand to 178.7 thousand); market share decreased from 30.8% to 24.3%.
  - O Mint-flavored e-cigarette sales decreased by 9.8% (from 23.0 thousand to 20.8 thousand); market share decreased from 3.0% to 2.8%.
  - O All other-flavored e-cigarette sales increased by 18.7% (from 195.9 thousand to 232.6 thousand); market share increased from 25.8% to 31.6%.



Figure 11. Illinois E-Cigarette Unit Sales by Product Type, 4 Week Estimates 1/2018 – 3/2022\*



<sup>\*</sup>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.

- 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 March 20, 2022:
  - Sales of disposable devices increased by 1.1% (from 288.3 thousand to 291.4 thousand); market share increased from 38.0% to 39.7%.
  - Sales of prefilled cartridges decreased by 5.5% (from 468.9 thousand to 443.4 thousand); market share decreased from 61.9% to 60.3%.



Figure 12. Illinois E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates 1/2018 – 3/2022

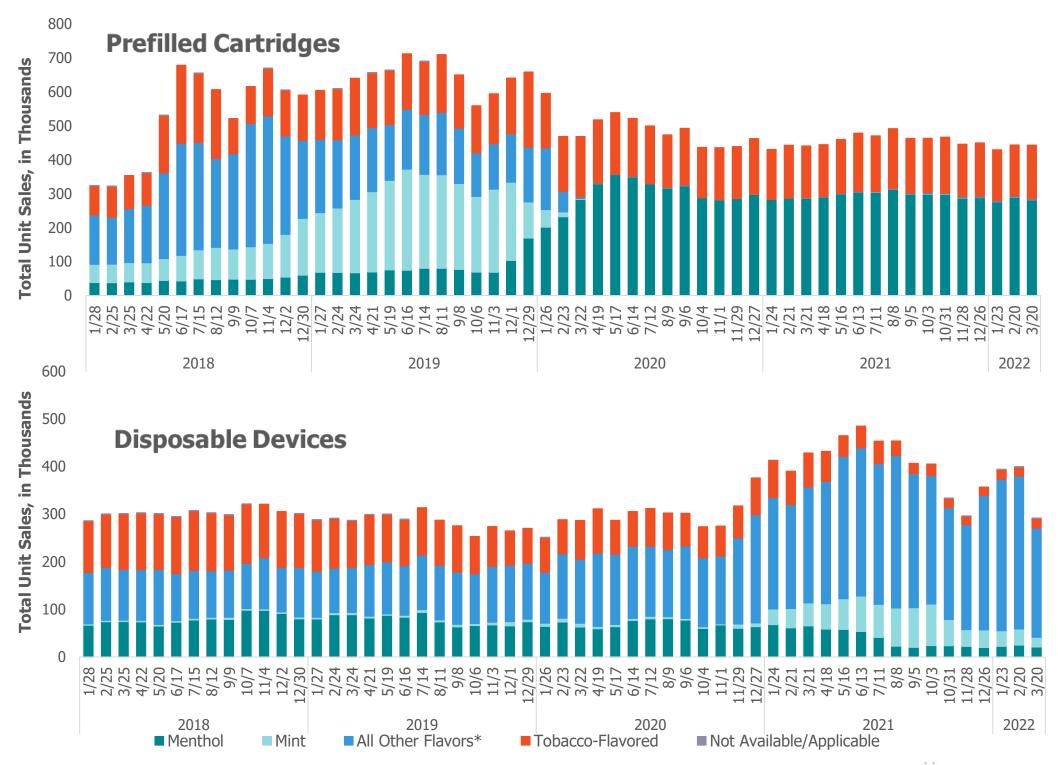
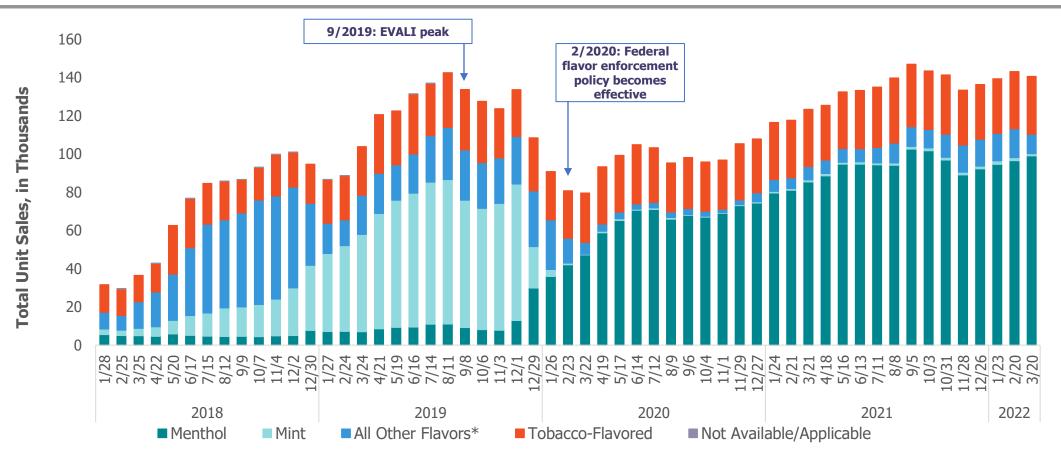


Figure 13. Maine E-Cigarette Unit Sales by Flavor, 4 Week Estimates 1/2018 – 3/2022\*

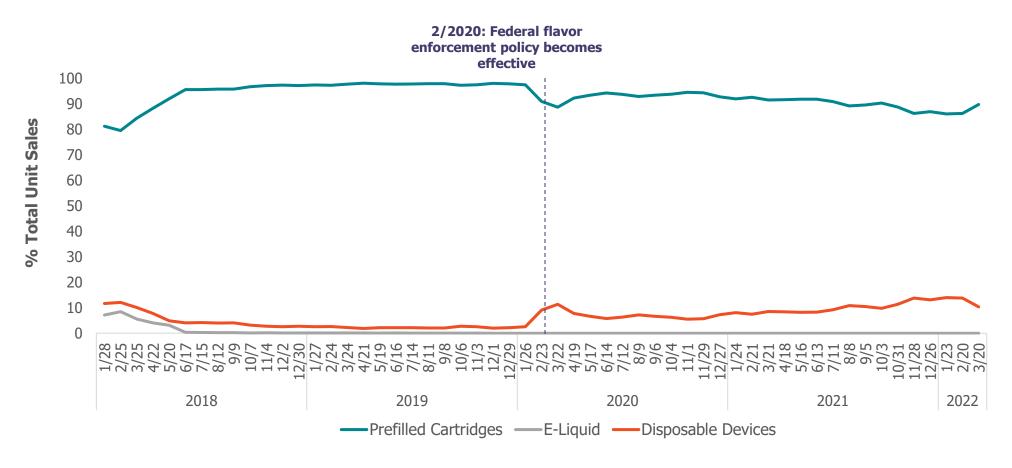


<sup>\*</sup>Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; All Other Flavors category includes fruit, clove/spice, chocolate, alcoholic drink (such as wine, cognac, or other cocktails), candy/desserts/other sweets, some other flavor; e-cigarette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

- From February 23, 2020 to March 20, 2022, monthly e-cigarette unit sales increased by 74.2% to 140.6 thousand units.
- From February 23, 2020 to March 20, 2022:
  - O Menthol-flavored e-cigarette sales increased by 135.4% (from 42.0 thousand to 99.0 thousand); market share increased from 52.1% to 70.4%.
  - O Tobacco-flavored e-cigarette sales increased by 21.9% (from 24.9 thousand to 30.3 thousand); market share decreased from 30.8% to 21.5%.
  - O Mint-flavored e-cigarette sales increased by 36.0% (from 0.9 thousand to 1.2 thousand); market share decreased from 1.1% to 0.9%.
  - O All other-flavored e-cigarette sales decreased by 21.6% (from 13.0 thousand to 10.2 thousand); market share decreased from 16.0% to 7.2%.



Figure 14. Maine E-Cigarette Unit Sales by Product Type, 4 Week Estimates 1/2018 – 3/2022\*



<sup>\*</sup>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.

- 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 December 26, 2021:
  - Sales of disposable devices increased by 97.4% (from 7.3 thousand to 14.5 thousand); market share increased from 9.1% to 10.3%.
  - Sales of prefilled cartridges increased by 71.9% (from 73.4 thousand to 126.1 thousand); market share decreased from 90.9% to 89.7%.



Figure 15. Maine E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates 1/2018 – 3/2022

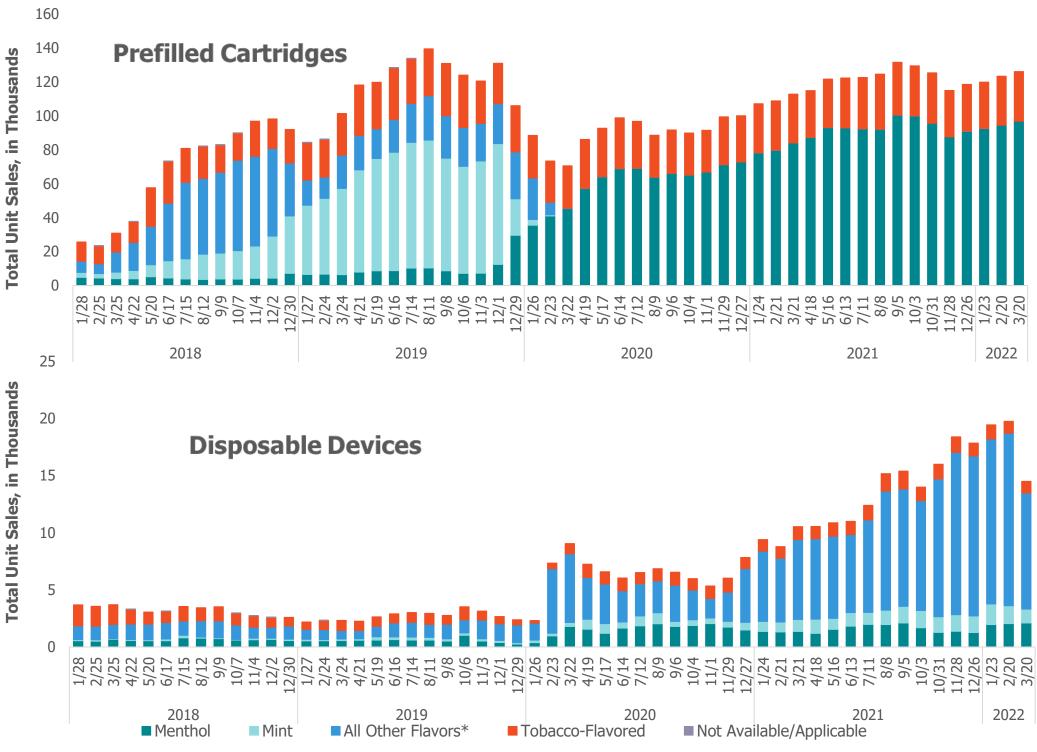
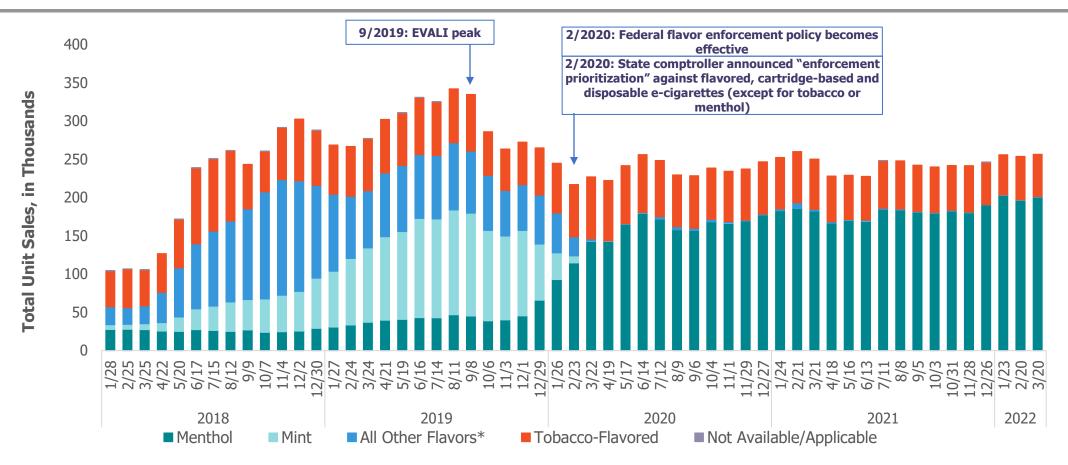


Figure 16. Maryland E-Cigarette Unit Sales by Flavor, 4 Week Estimates 1/2018 – 3/2022\*

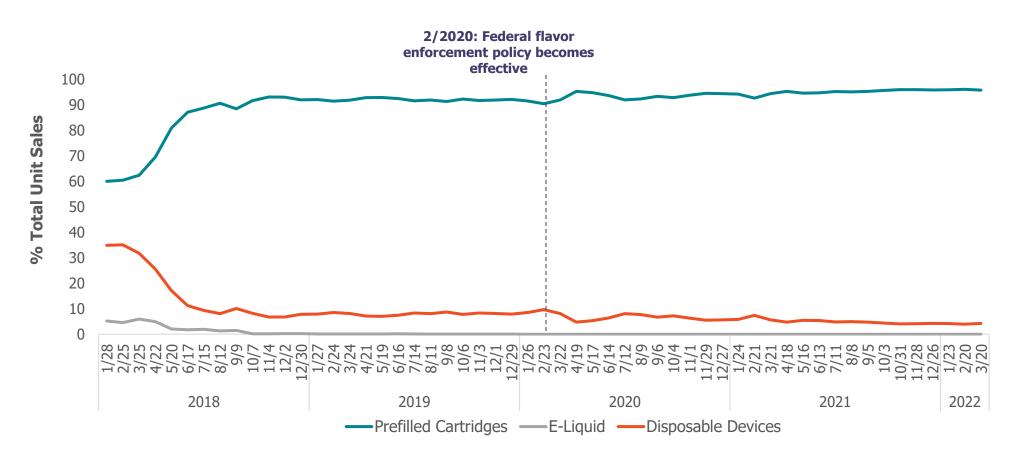


<sup>\*</sup>Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; All Other Flavors category includes fruit, clove/spice, chocolate, alcoholic drink (such as wine, cognac, or other cocktails), candy/desserts/other sweets, some other flavor; e-cigarette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

- From February 23, 2020 to March 20, 2022, monthly e-cigarette unit sales increased by 18.2% to 256.6 thousand units.
- From February 23, 2020 to March 20, 2022:
  - O Menthol-flavored e-cigarette sales increased by 74.8% (from 114.6 thousand to 200.4 thousand); market share increased from 52.8% to 78.1%.
  - O Tobacco-flavored e-cigarette sales decreased by 19.3% (from 68.5 thousand to 55.3 thousand); market share decreased from 31.6% to 21.5%.
  - O Mint-flavored e-cigarette sales decreased by 97.7% (from 9.1 thousand to 0.2 thousand); market share decreased from 4.2% to 0.1%.
  - O All other-flavored e-cigarette sales decreased by 97.2% (from 24.9 thousand to 0.7 thousand); market share decreased from 11.5% to 0.3%.



Figure 17. Maryland E-Cigarette Unit Sales by Product Type, 4 Week Estimates 1/2018 – 3/2022\*



<sup>\*</sup>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.

- 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 March 20, 2022:
  - o Sales of disposable devices decreased by 47.8% (from 20.9 thousand to 10.9 thousand); market share decreased from 9.6% to 4.2%.
  - Sales of prefilled cartridges increased by 25.2% (from 196.3 thousand to 245.7 thousand); market share increased from 90.4% to 95.8%.



Figure 18. Maryland E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates 1/2018 – 3/2022

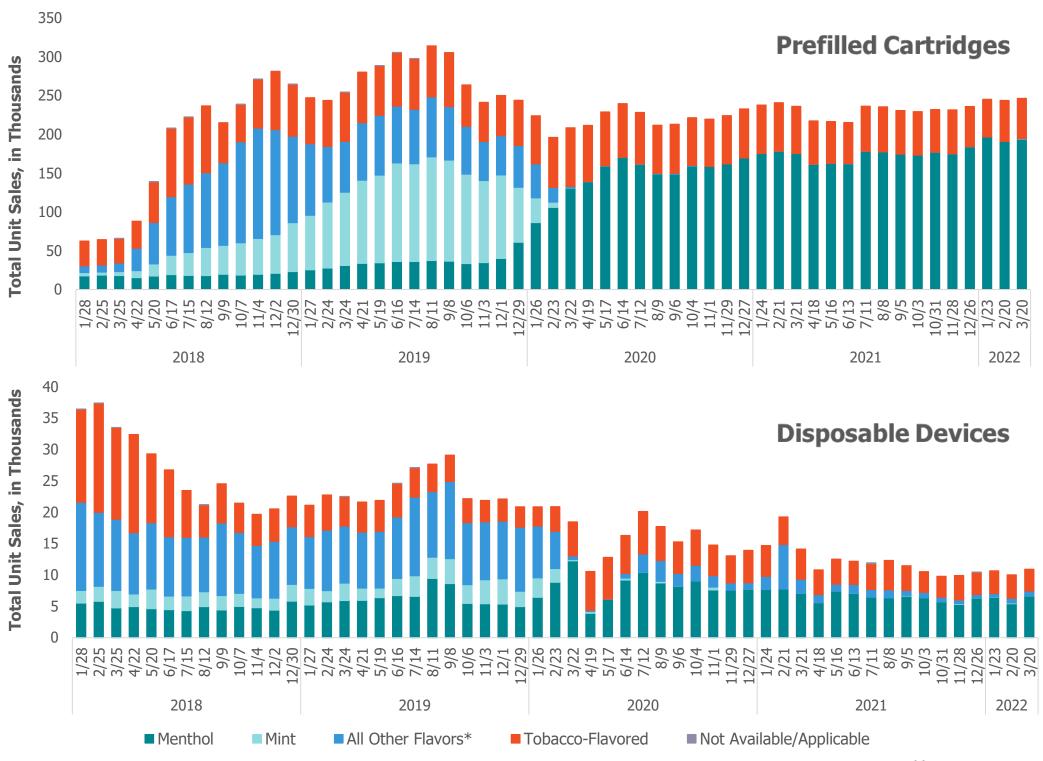
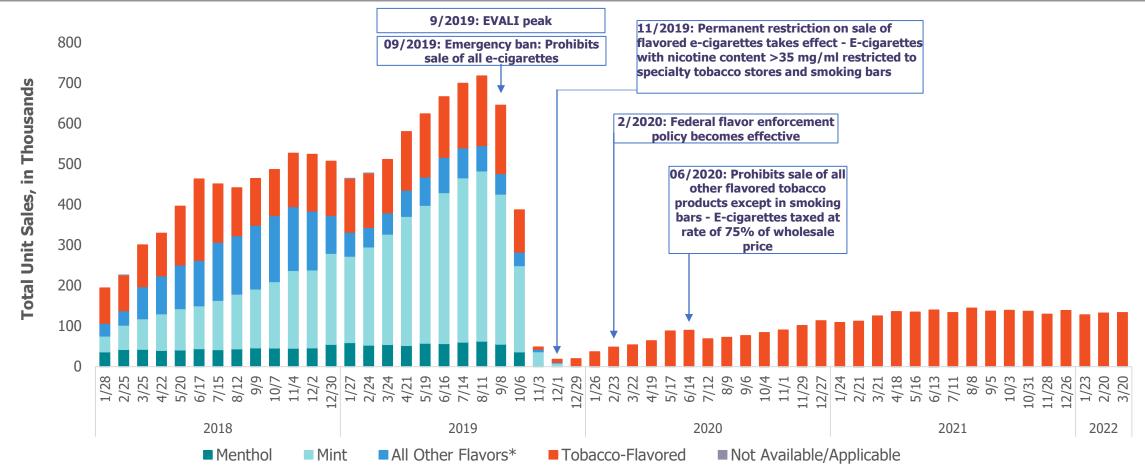


Figure 19. Massachusetts E-Cigarette Unit Sales by Flavor, 4 Week Estimates 1/2018 – 3/2022\*



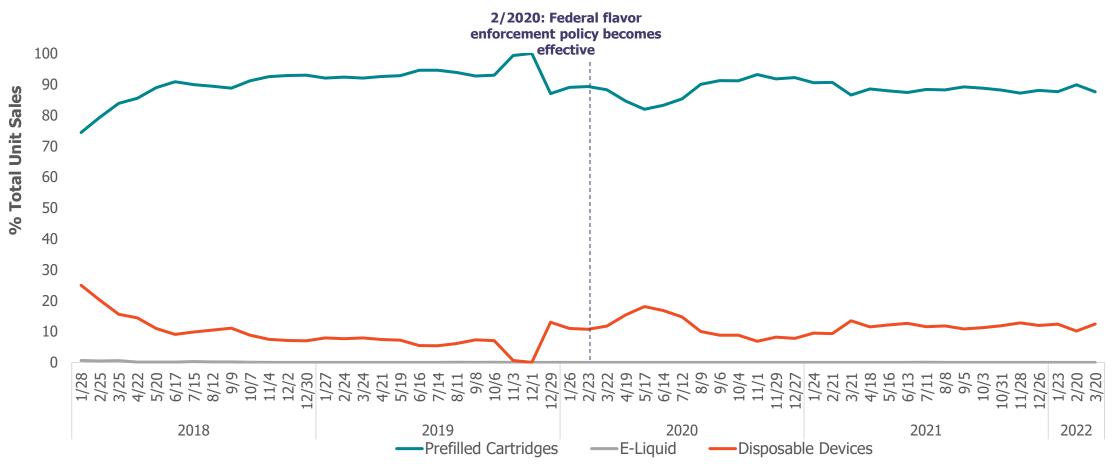
<sup>\*</sup>Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; All Other Flavors category includes fruit, clove/spice, chocolate, alcoholic drink (such as wine, cognac, or other cocktails), candy/desserts/other sweets, some other flavor; e-cigarette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

#### Trends of Unit Sales by Flavor following Massachusetts's flavor restrictions

- Following Massachusetts's flavored e-cigarette restrictions, monthly e-cigarette total unit sales decreased by 79.3% from September 8, 2019 to March 20, 2022 (from 645.2 thousand to 133.6 thousand).
- From September 8, 2019 to March 20, 2022:
  - O Menthol-flavored e-cigarette sales decreased by 98.9% (from 55.3 thousand to 0.6 thousand); market share decreased from 8.6% to 0.5%.
  - O Tobacco-flavored e-cigarette sales decreased by 21.5% (from 169.0 thousand to 132.7 thousand); market share increased from 26.2% to 99.3%.
  - O Mint-flavored e-cigarette sales decreased by 100.0% (from 370.4 thousand to 0.0 thousand); market share decreased from 57.4% to 0.0%.
  - All other-flavored e-cigarette sales decreased by 99.5% (from 50.6 thousand to 0.2 thousand); market share decreased from 7.8% to 0.2%.



Figure 20. Massachusetts E-Cigarette Unit Sales by Product Type, 4 Week Estimates 1/2018 – 3/2022\*



<sup>\*</sup>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.

- 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 March 20, 2022:
  - Sales of disposable devices increased by 221.3% (from 5.2 thousand to 16.6 thousand); market share increased from 10.7% to 12.4%.
  - Sales of prefilled cartridges increased by 171.8% (from 43.0 thousand to 116.9 thousand); market share decreased from 89.3% to 87.6%.



Figure 21. Massachusetts E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates 1/2018 - 3/2022

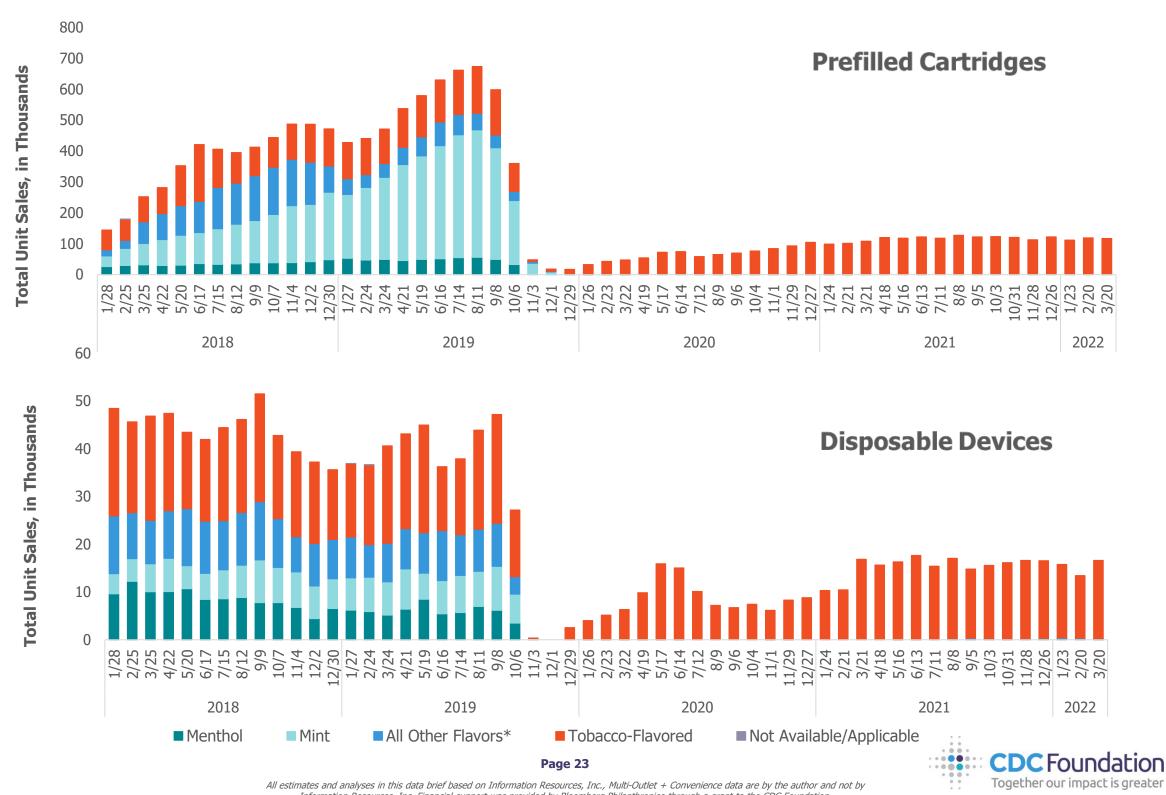
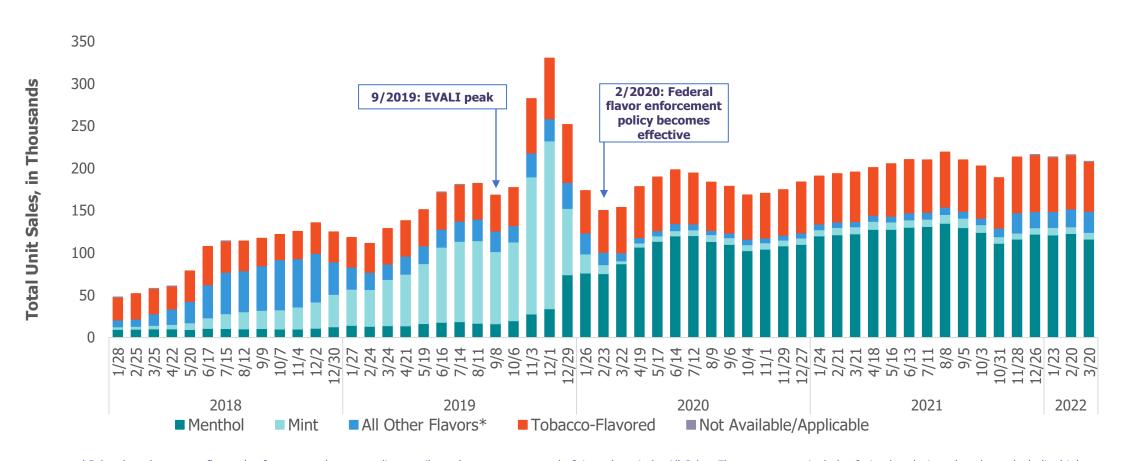


Figure 22. New Hampshire E-Cigarette Unit Sales by Flavor, 4 Week Estimates 1/2018 – 3/2022\*

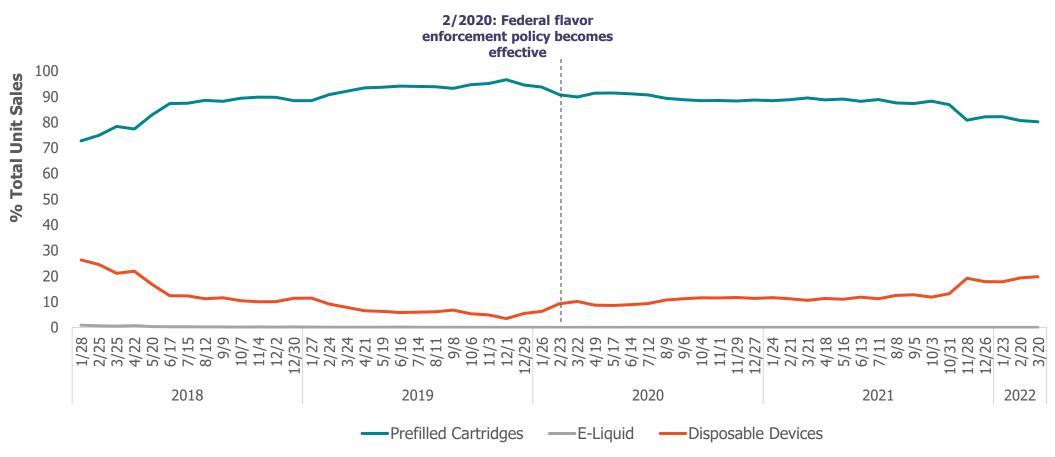


\*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; All Other Flavors category includes fruit, clove/spice, chocolate, alcoholic drink (such as wine, cognac, or other cocktails), candy/desserts/other sweets, some other flavor; e-cigarette accessories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

- From February 23, 2020 to March 20, 2022, monthly e-cigarette unit sales increased by 38.5% to 208.1 thousand units.
- From February 23, 2020 to March 20, 2022:
  - Menthol-flavored e-cigarette sales increased by 54.1% (from 75.5 thousand to 116.3 thousand); market share increased from 50.3% to 55.9%.
  - O Tobacco-flavored e-cigarette sales increased by 19.1% (from 49.4 thousand to 58.9 thousand); market share decreased from 32.9% to 28.3%.
  - O Mint-flavored e-cigarette sales decreased by 26.1% (from 10.6 thousand to 7.9 thousand); market share decreased from 7.1% to 3.8%.
  - All other-flavored e-cigarette sales increased by 70.6% (from 14.6 thousand to 25.0 thousand); market share increased from 9.7% to 12.0%.



Figure 23. New Hampshire E-Cigarette Unit Sales by Product Type, 4 Week Estimates 1/2018 – 3/2022\*



<sup>\*</sup>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.

- 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 March 20, 2022:
  - Sales of disposable devices increased by 196.3% (from 13.9 thousand to 41.2 thousand); market share increased from 9.3% to 19.8%.
  - Sales of prefilled cartridges increased by 22.4% (from 136.3 thousand to 166.8 thousand); market share decreased from 90.7% to 80.2%.



Figure 24. New Hampshire E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates 1/2018 – 3/2022

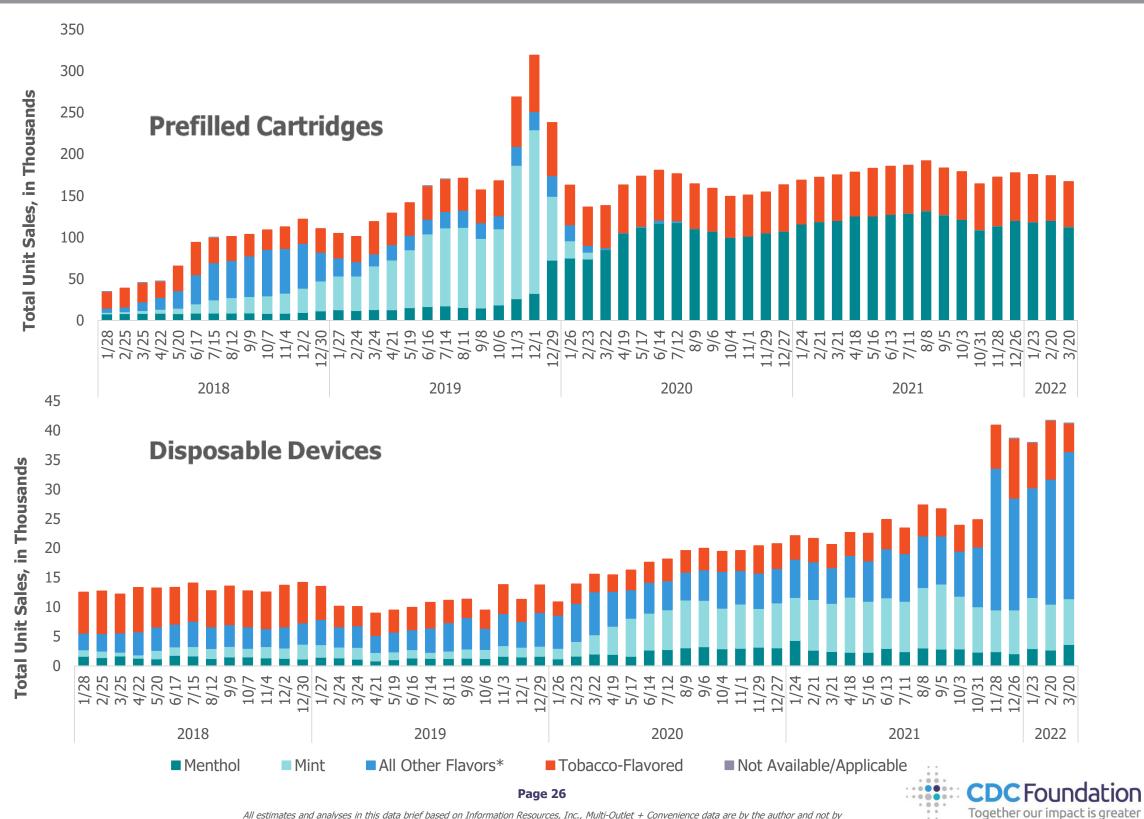
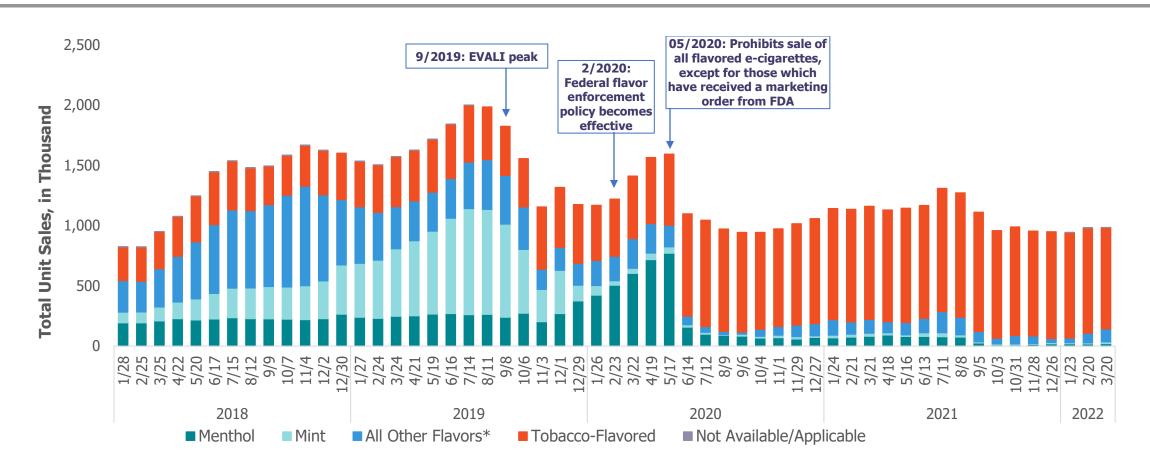


Figure 25. New York E-Cigarette Unit Sales by Flavor, 4 Week Estimates 1/2018 - 3/2022\*



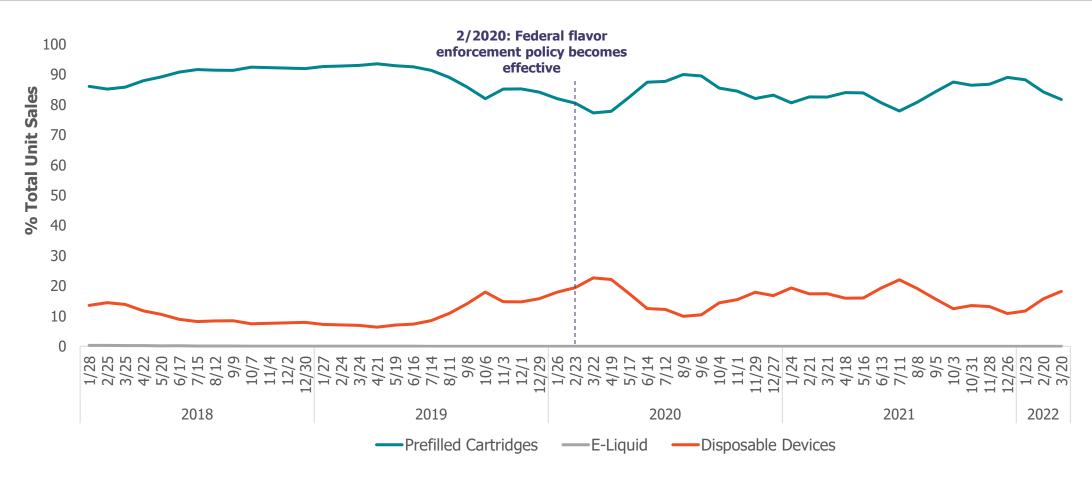
<sup>\*</sup>Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; All Other Flavors category includes fruit, clove/spice, chocolate, alcoholic drink (such as wine, cognac, or other cocktails), candy/desserts/other sweets, some other flavor; e-cigarette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

#### **Trends of Unit Sales by Flavor (5/17/20-03/20/22)**

- Following New York's flavored e-cigarette restriction, monthly e-cigarette total unit sales decreased by 38.2% between May 17, 2020 and March 20, 2022 (from 1594.0 thousand to 984.9 thousand).
- From May 17, 2020 to March 20, 2022:
  - O Menthol-flavored e-cigarette sales decreased by 97.4% (from 770.3 thousand to 20.1 thousand); market share decreased from 48.3% to 2.0%.
  - O Tobacco-flavored e-cigarette sales increased by 42.3% (from 592.1 thousand to 842.8 thousand); market share increased from 37.1% to 85.6%.
  - O Mint-flavored e-cigarette sales decreased by 72.6% (from 52.5 thousand to 14.4 thousand); market share decreased from 3.3% to 1.5%.
  - O All other-flavored e-cigarette sales decreased by 40.2% (from 179.1 thousand to 107.1 thousand); market share decreased from 11.2% to 10.9%.



Figure 26. New York E-Cigarette Unit Sales by Product Type, 4 Week Estimates 1/2018 – 3/2022\*



<sup>\*</sup>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.

- 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 March 20, 2022:
  - Sales of disposable devices decreased by 24.4% (from 237.4 thousand to 179.6 thousand); market share decreased from 19.5% to 18.2%.
  - Sales of prefilled cartridges decreased by 18.0% (from 982.3 thousand to 805.3 thousand); market share increased from 80.5% to 81.8%.



Figure 27. New York E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates 1/2018 – 3/2022

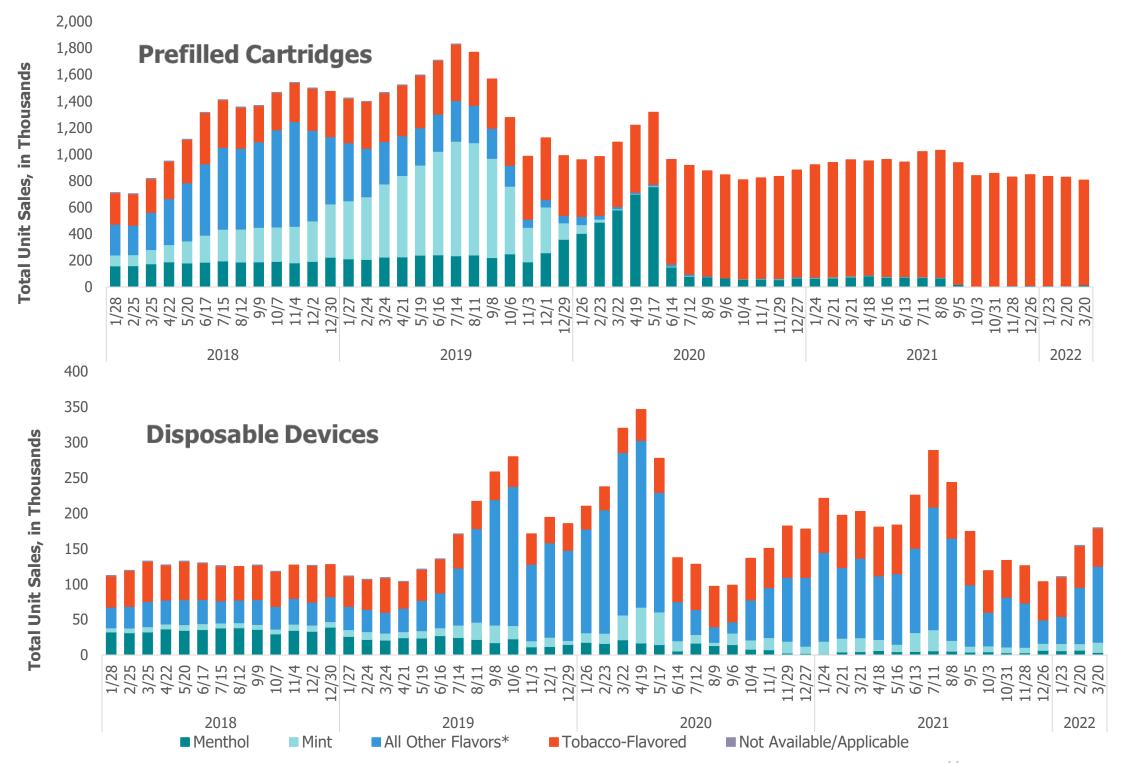
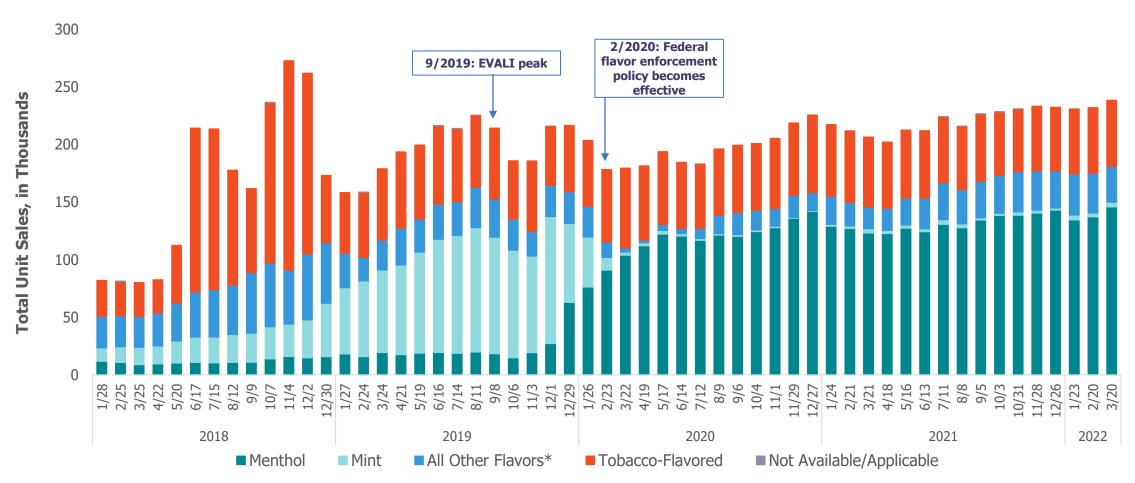


Figure 28. Oregon E-Cigarette Unit Sales by Flavor, 4 Week Estimates 1/2018 – 3/2022\*

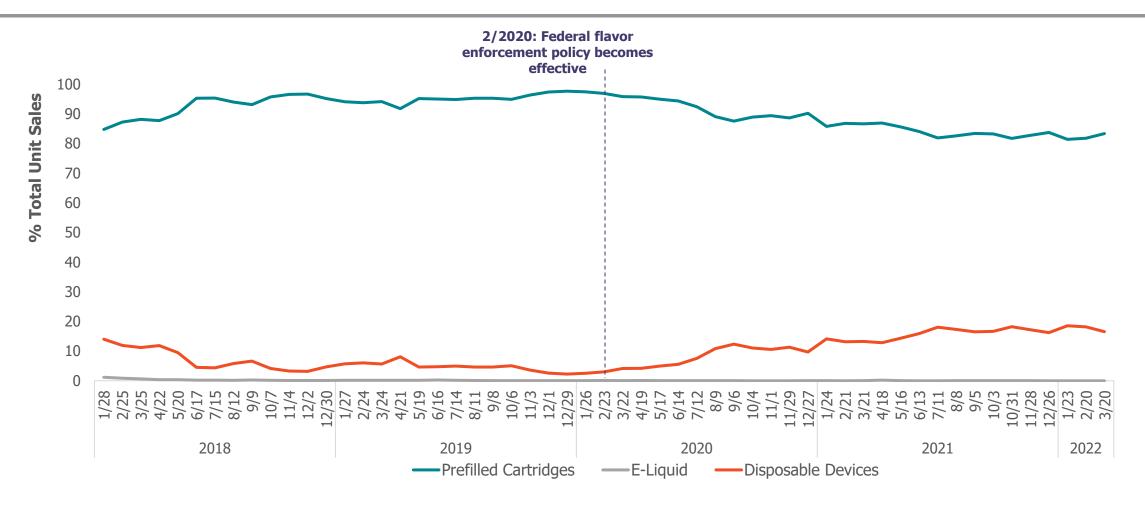


<sup>\*</sup>Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; All Other Flavors category includes fruit, clove/spice, chocolate, alcoholic drink (such as wine, cognac, or other cocktails), candy/desserts/other sweets, some other flavor; e-cigarette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

- From February 23, 2020 to March 20, 2022, monthly e-cigarette unit sales increased by 33.8% to 238.6 thousand units.
- From February 23, 2020 to March 20, 2022:
  - Menthol-flavored e-cigarette sales increased by 60.4% (from 90.9 thousand to 145.8 thousand); market share increased from 51.0% to 61.1%.
  - O Tobacco-flavored e-cigarette sales decreased by 8.6% (from 63.0 thousand to 57.6 thousand); market share decreased from 35.3% to 24.1%.
  - O Mint-flavored e-cigarette sales decreased by 62.8% (from 10.9 thousand to 4.1 thousand); market share decreased from 6.1% to 1.7%.
  - O All other-flavored e-cigarette sales increased by 131.6% (from 13.4 thousand to 31.1 thousand); market share increased from 7.5% to 13.0%.



Figure 29. Oregon E-Cigarette Unit Sales by Product Type, 4 Week Estimates 1/2018 – 3/2022\*



<sup>\*</sup>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.

- 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 March 20, 2022:
  - Sales of disposable devices increased by 640.5% (from 5.3 thousand to 39.6 thousand); market share increased from 3.0% to 16.6%.
  - Sales of prefilled cartridges increased by 15.2% (from 172.8 thousand to 199.0 thousand); market share decreased from 96.9% to 83.4%.



Figure 30. Oregon E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates 1/2018 – 3/2022

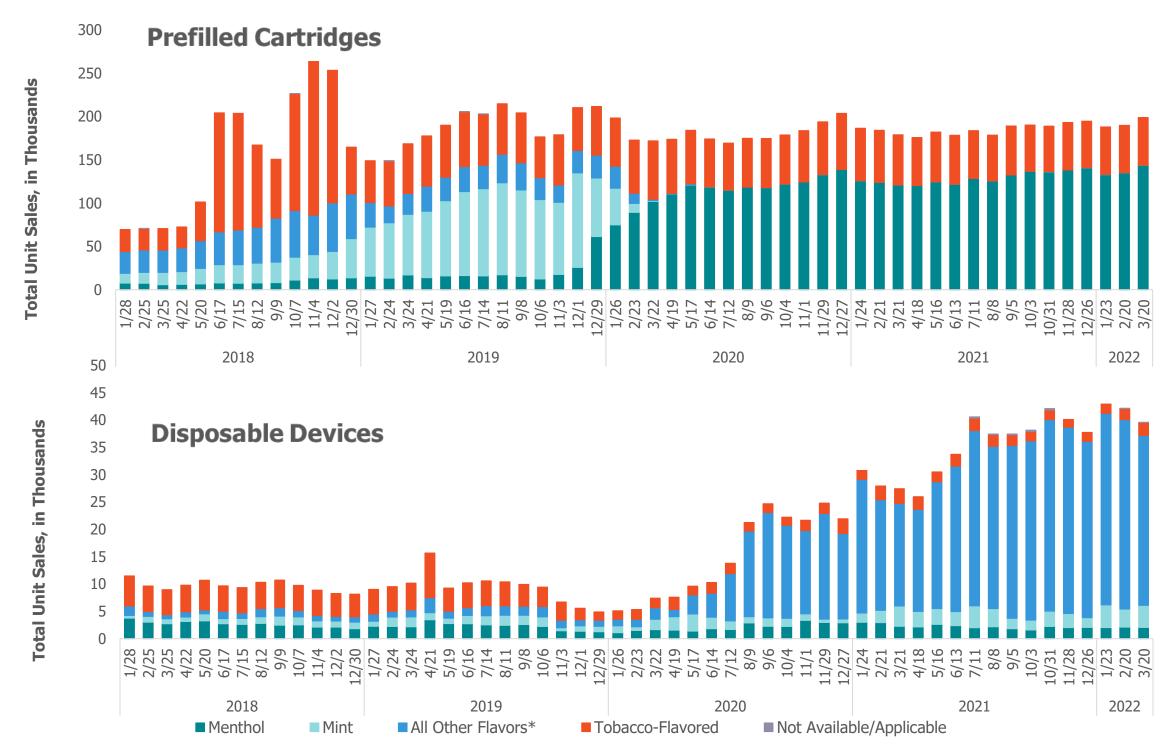
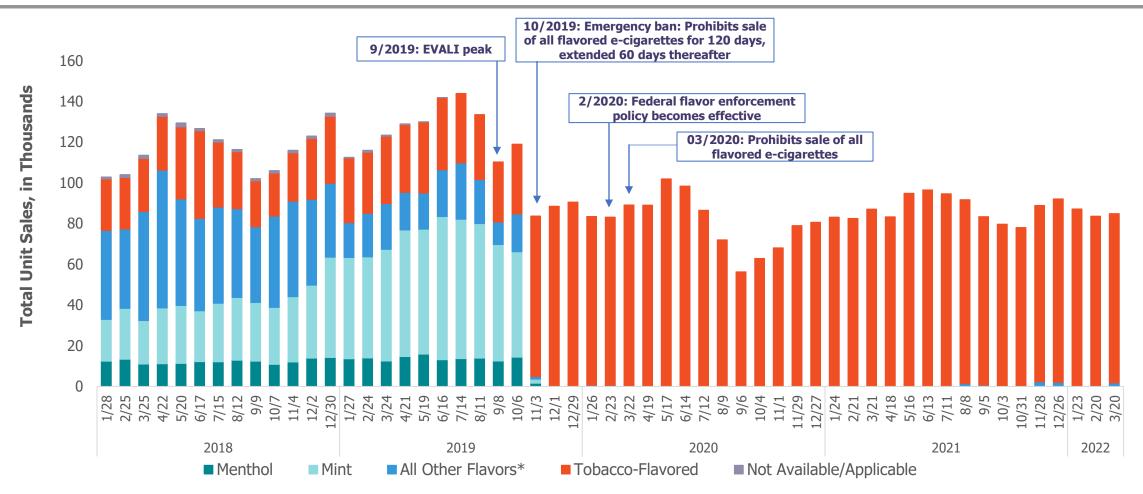


Figure 31. Rhode Island E-Cigarette Unit Sales by Flavor, 4 Week Estimates 1/2018 – 3/2022\*



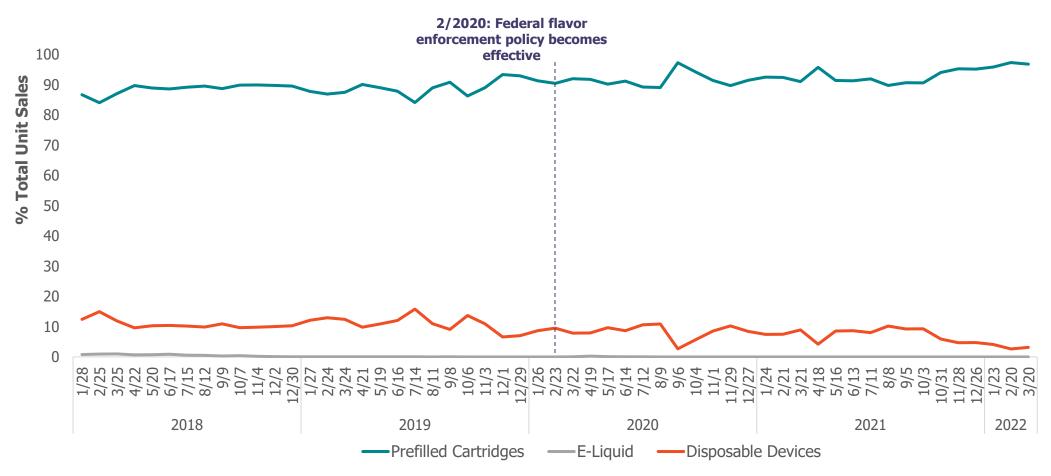
<sup>\*</sup>Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; All Other Flavors category includes fruit, clove/spice, chocolate, alcoholic drink (such as wine, cognac, or other cocktails), candy/desserts/other sweets, some other flavor; e-cigarette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

#### **Trends of Unit Sales by Flavor (10/6/19-03/20/22)**

- Following Rhode Island's flavored e-cigarette restriction, monthly e-cigarette total unit sales decreased by 28.7% from October 6, 2019 to March 20, 2022 (from 119.0 thousand to 84.9 thousand).
- From October 6, 2019 to March 20, 2022:
  - Menthol-flavored e-cigarette sales decreased by 97.1% (from 14.3 thousand to 0.4 thousand); market share decreased from 12.0% to 0.5%.
  - O Tobacco-flavored e-cigarette sales increased by 142.5% (from 34.3 thousand to 83.2 thousand); market share increased from 28.8% to 98.0%.
  - O Mint-flavored e-cigarette sales decreased by 100.0% (from 51.8 thousand to 0.0 thousand); market share decreased from 43.5% to 0.0%.
  - O All other-flavored e-cigarette sales decreased by 93.2% (from 18.6 thousand to 1.3 thousand); market share decreased from 15.6% to 1.5%.



Figure 32. Rhode Island E-Cigarette Unit Sales by Product Type, 4 Week Estimates 1/2018 – 3/2022\*



<sup>\*</sup>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.

- 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 March 20, 2022:
  - Sales of disposable devices decreased by 65.9% (from 7.9 thousand to 2.7 thousand); market share decreased from 9.5% to 3.2%.
  - Sales of prefilled cartridges increased by 9.3% (from 75.2 thousand to 82.2 thousand); market share increased from 90.5% to 96.8%.



Figure 33. Rhode Island E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates 1/2018 – 3/2022

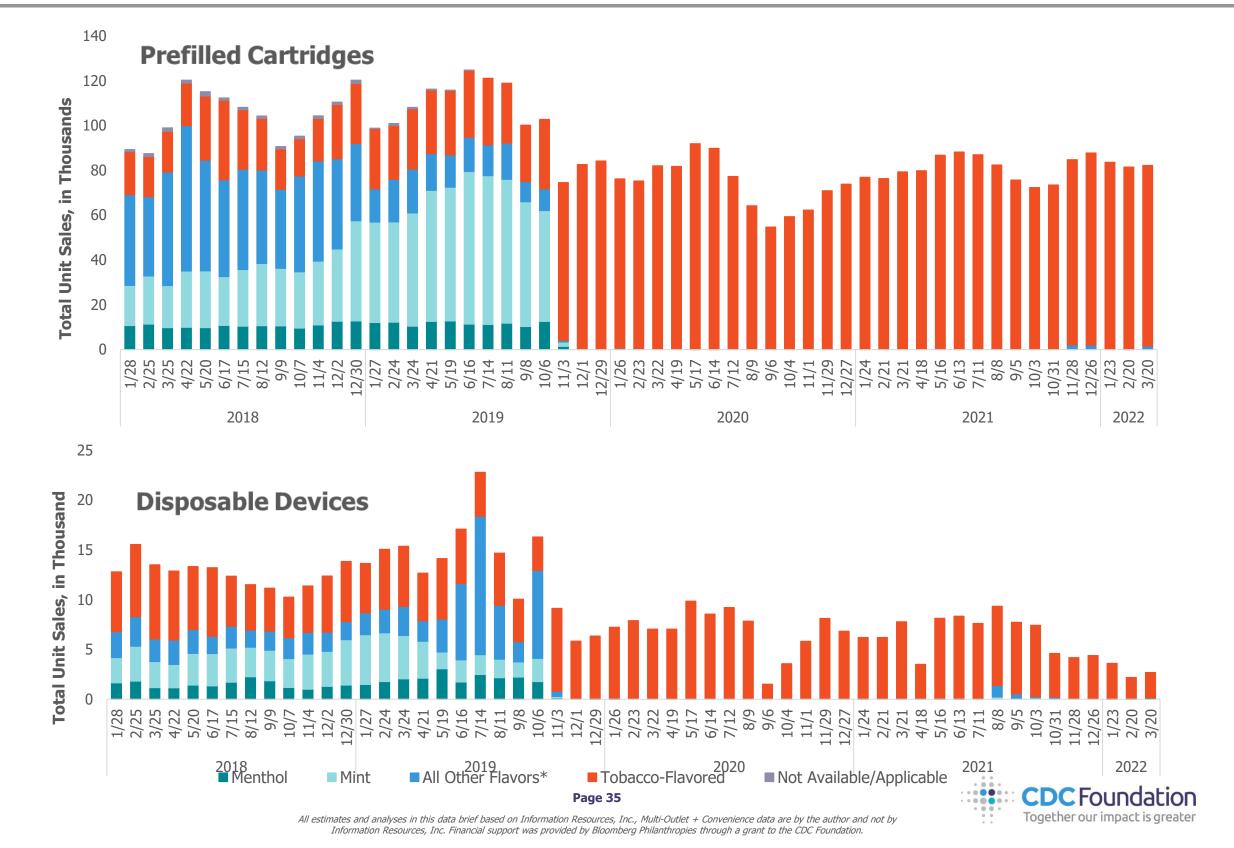
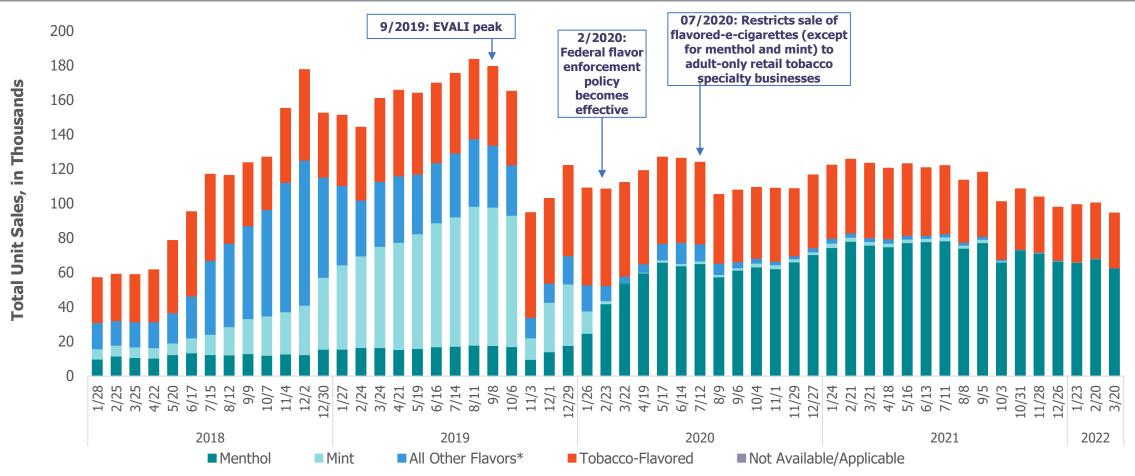


Figure 34. Utah E-Cigarette Unit Sales by Flavor, 4 Week Estimates 1/2018 – 3/2022\*

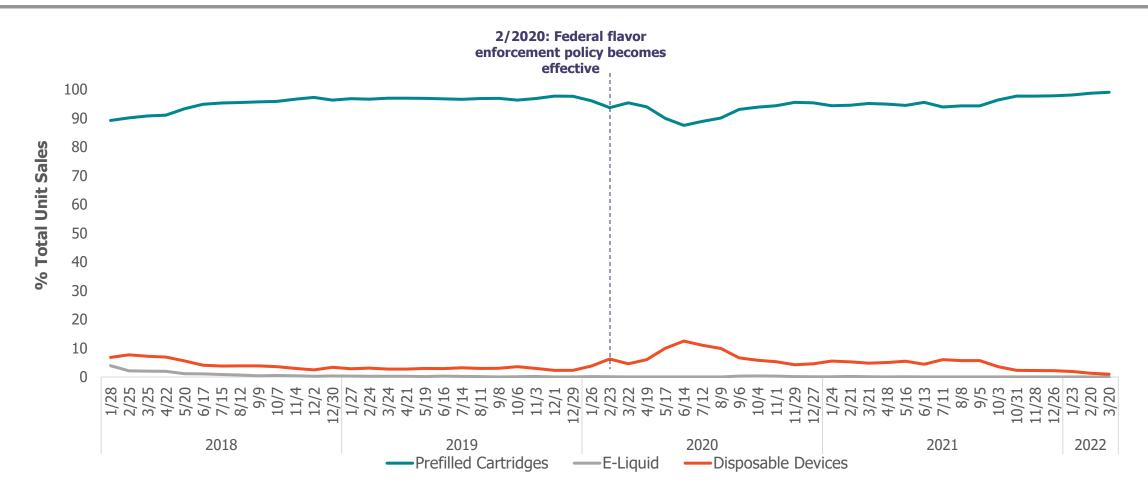


<sup>\*</sup>Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; All Other Flavors category includes fruit, clove/spice, chocolate, alcoholic drink (such as wine, cognac, or other cocktails), candy/desserts/other sweets, some other flavor; e-cigarette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

- From February 23, 2020 to March 20, 2022, monthly e-cigarette unit sales decreased by 12.9% to 94.5 thousand units.
- From February 23, 2020 to March 20, 2022:
  - O Menthol-flavored e-cigarette sales increased by 49.4% (from 41.9 thousand to 62.6 thousand); market share increased from 38.6% to 66.2%.
  - O Tobacco-flavored e-cigarette sales decreased by 43.2% (from 55.9 thousand to 31.8 thousand); market share decreased from 51.6% to 33.6%.
  - O Mint-flavored e-cigarette sales decreased by 95.3% (from 1.8 thousand to 0.1 thousand); market share decreased from 1.7% to 0.1%.
  - O All other-flavored e-cigarette sales decreased by 99.4% (from 8.8 thousand to 0.1 thousand); market share decreased from 8.2% to 0.1%.



Figure 35. Utah E-Cigarette Unit Sales by Product Type, 4 Week Estimates 1/2018 – 3/2022\*



<sup>\*</sup>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.

- 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 March 20, 2022:
  - Sales of disposable devices decreased by 86.7% (from 6.8 thousand to 0.9 thousand); market share decreased from 6.3% to 1.0%.
  - Sales of prefilled cartridges decreased by 7.9% (from 101.6 thousand to 93.6 thousand); market share increased from 93.7% to 99.0%.



Figure 36. Utah E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates 1/2018 – 3/2022

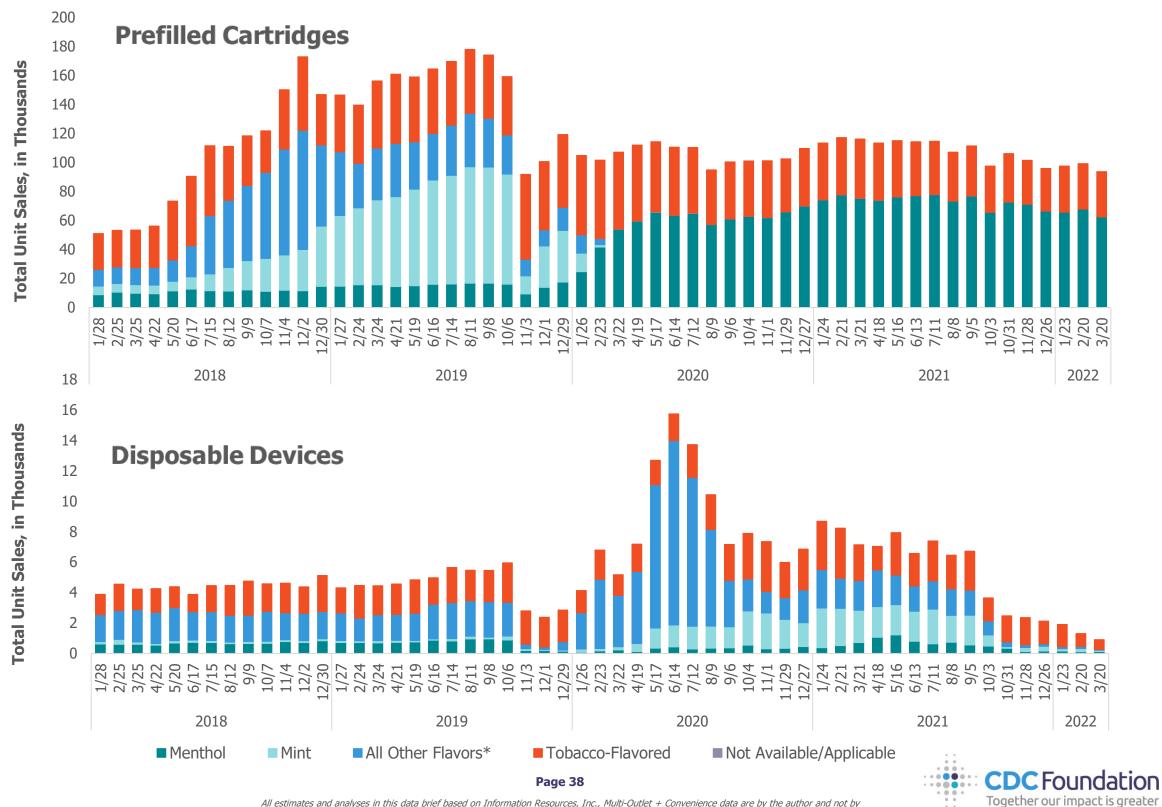
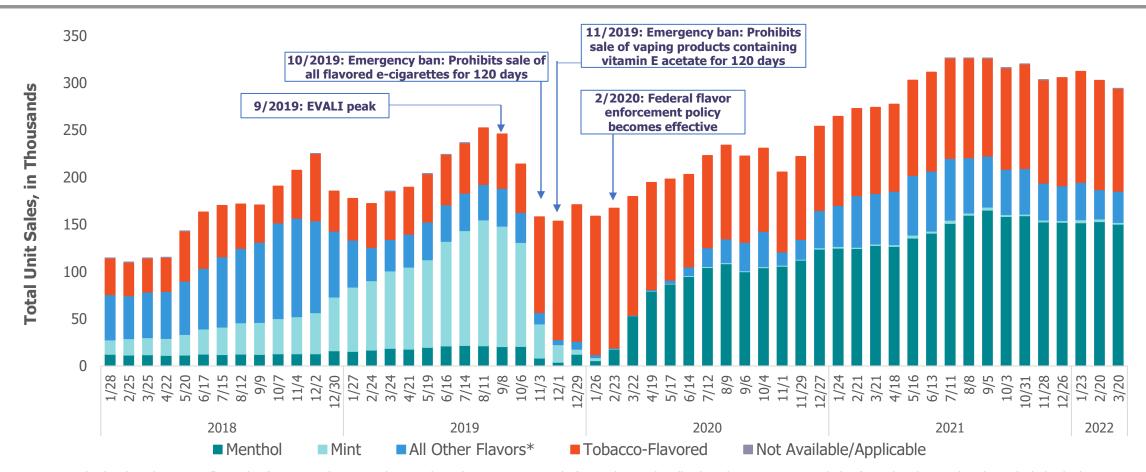


Figure 37. Washington E-Cigarette Unit Sales by Flavor, 4 Week Estimates 1/2018 – 3/2022\*



<sup>\*</sup>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 (10/6/19 - 1/26/20)**

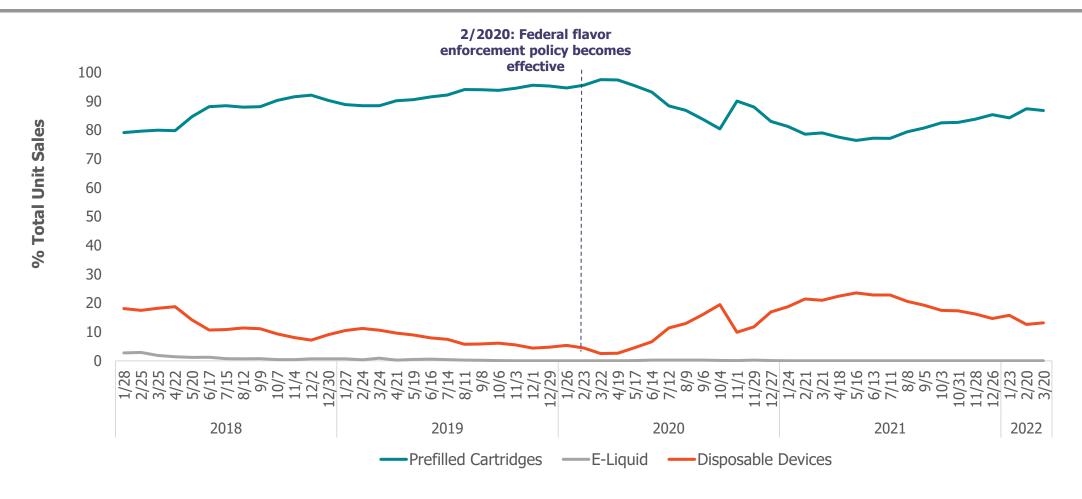
• Following Washington's flavored e-cigarette restriction, monthly e-cigarette total unit sales decreased by 25.8% from October 6, 2019, to January 26, 2020 (from 214.0 thousand to 158.7 thousand).

## Trends of Unit Sales by Flavor (02/23/2020 - 03/20/2022)

- Monthly e-cigarette total unit sales increased by 75.9% from 2020 to 2021 (from 167.2 thousand to 294.0 thousand).
- From February 23, 2020 to March 20, 2022:
  - O Menthol-flavored e-cigarette sales increased by 737.1% (from 18.0 thousand to 150.3 thousand); market share increased from 10.7% to 51.1%.
  - O Tobacco-flavored e-cigarette sales decreased by 26.5% (from 148.0 thousand to 108.7 thousand); market share decreased from 88.5% to 37.0%.
  - O Mint-flavored e-cigarette sales increased by 273.9% (from 0.5 thousand to 1.9 thousand); market share increased from 0.3% to 0.6%.
  - O All other-flavored e-cigarette sales increased by 4609.1% (from 0.7 thousand to 33.1 thousand); market share increased from 0.4% to 11.3%.



Figure 38. Washington E-Cigarette Unit Sales by Product Type, 4 Week Estimates 1/2018 – 3/2022\*



<sup>\*</sup>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.

- 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 March 20, 2022:
  - o Sales of disposable devices increased by 424.0% (from 7.4 thousand to 38.7 thousand); market share increased from 4.4% to 13.2%.
  - Sales of prefilled cartridges increased by 59.8% (from 159.8 thousand to 255.2 thousand); market share decreased from 95.6% to 86.8%.



Figure 39. Washington E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates 1/2018 - 3/2022

