

# 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 2017 through December 2021.**

- **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.

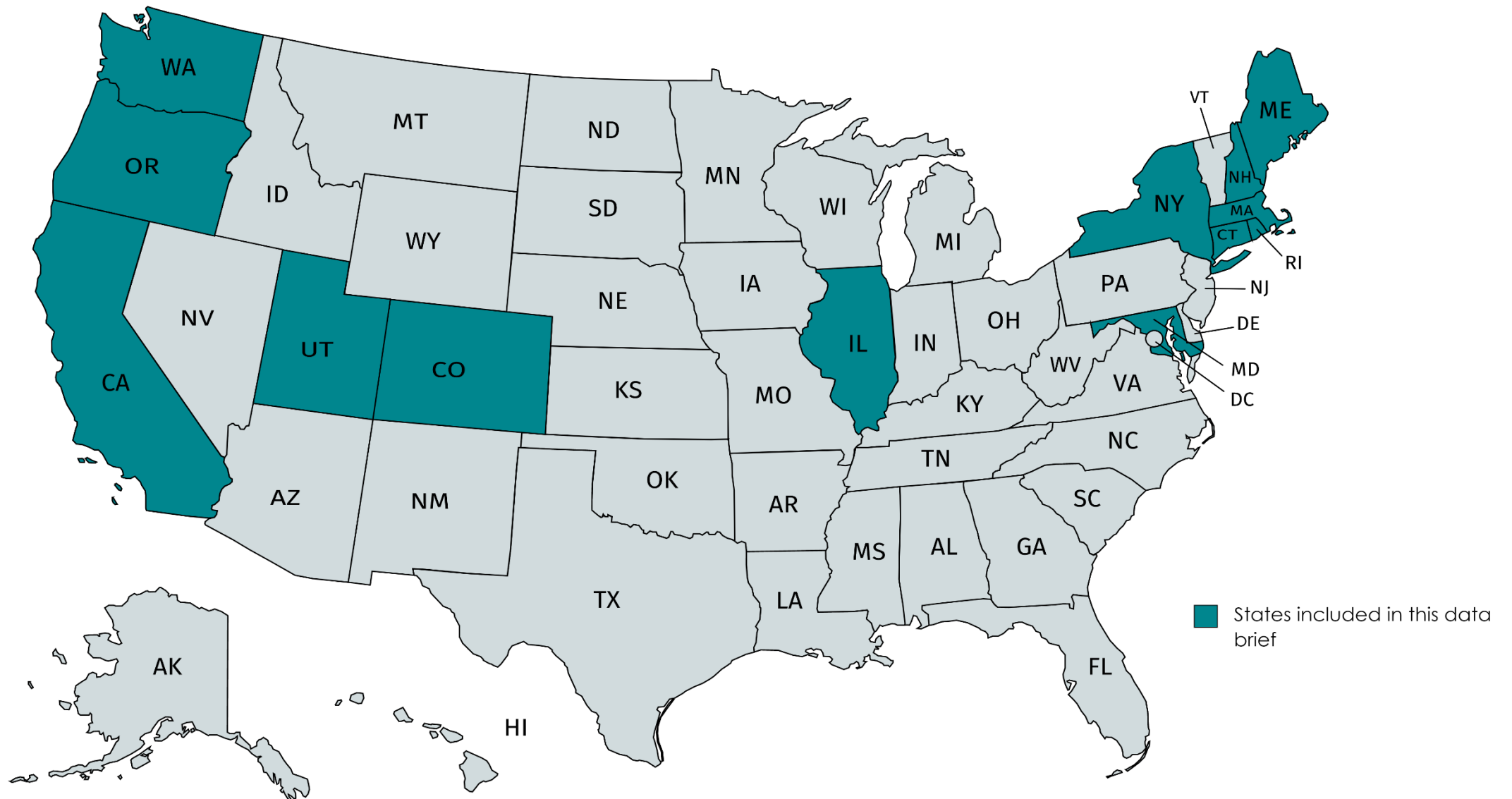
- **Other Relevant Issues**

- 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.

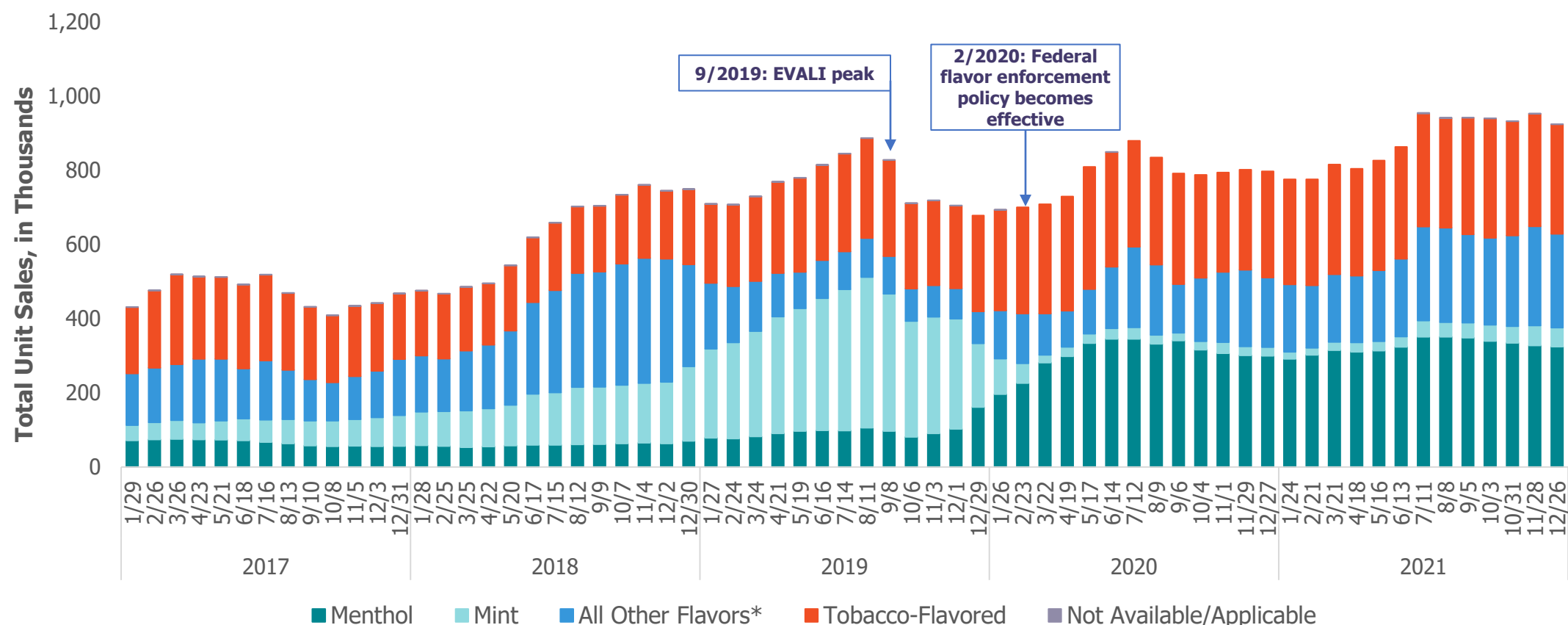
- **State and Local Legislative Initiatives**

- As of December 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](#)**.

## States Presented in the Data Brief



**Figure 1. California E-Cigarette Unit Sales by Flavor, 4 Week Estimates 1/2017 – 12/2021\***

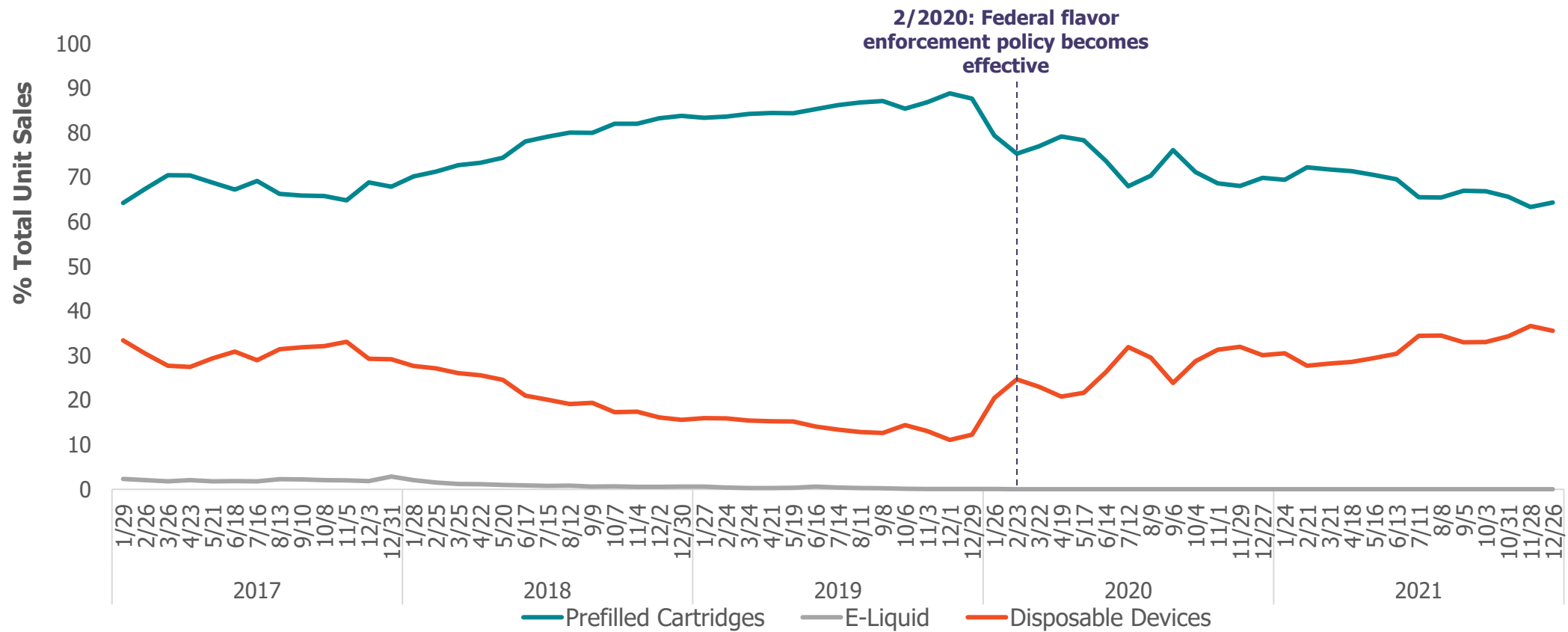


\*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; All Other Flavors category includes fruit, clove/spice, chocolate, alcoholic drink (such as wine, cognac, or other cocktails), candy/desserts/other sweets, some other flavor; e-cigarette accessories 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 December 26, 2021, monthly e-cigarette unit sales increased by 31.9% to 924.2 thousand units.
- From February 23, 2020 to December 26, 2021:
  - Menthol-flavored e-cigarette sales increased by 43.4% (from 226.4 thousand to 324.7 thousand); market share increased from 32.3% to 35.1%.
  - Tobacco-flavored e-cigarette sales increased by 3.0% (from 286.9 thousand to 295.4 thousand); market share decreased from 41.0% to 32.0%.
  - Mint-flavored e-cigarette sales decreased by 3.5% (from 53.2 thousand to 51.3 thousand); market share decreased from 7.6% to 5.5%.
  - All other-flavored e-cigarette sales increased by 88.5% (from 134.1 thousand to 252.7 thousand); market share increased from 19.1% to 27.3%.

**Figure 2. California E-Cigarette Unit Sales by Product Type, 4 Week Estimates 1/2017 – 12/2021\***

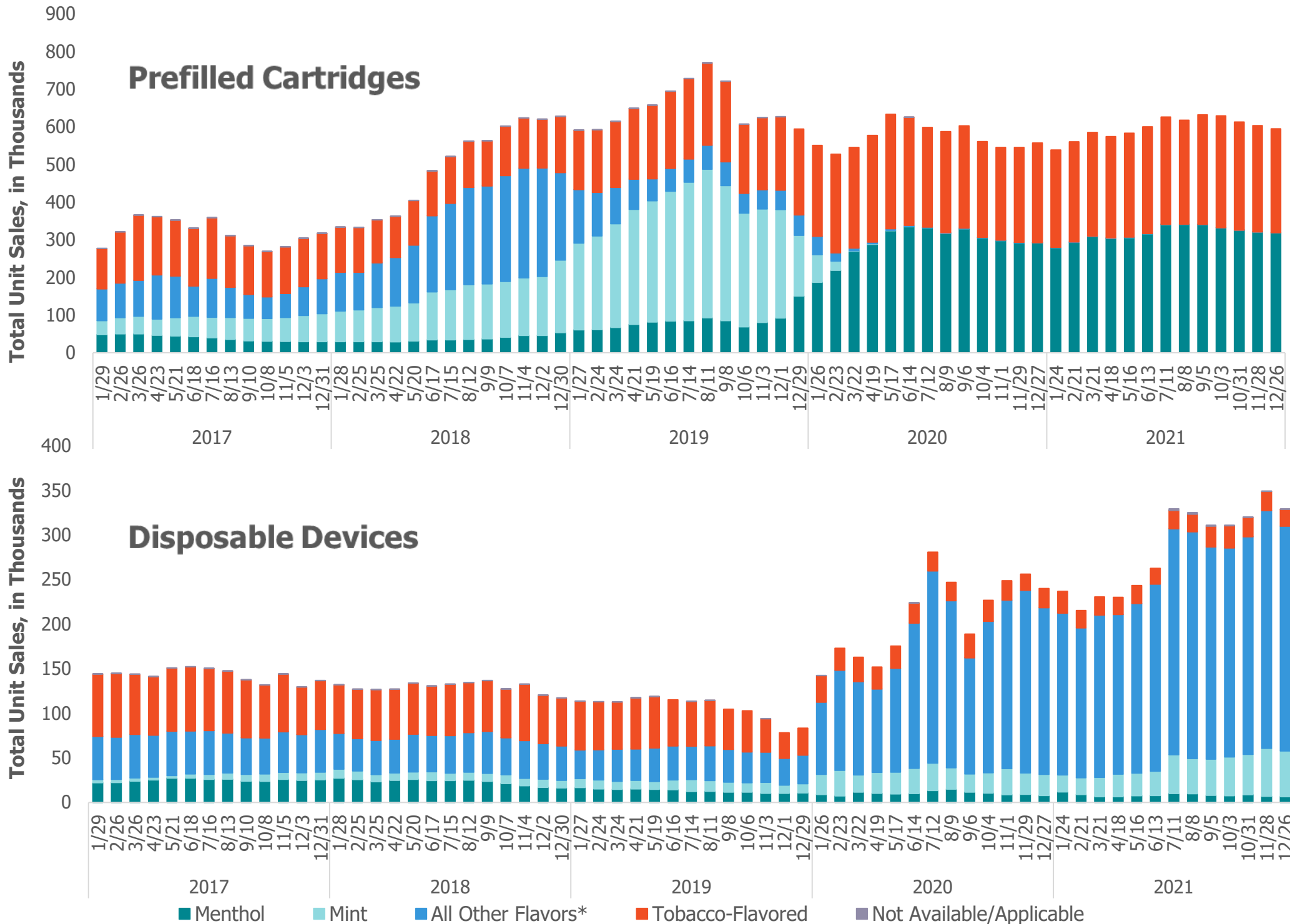


\*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; prefilled cartridges include tanks, cartridges, and pods used in rechargeable and reusable e-cigarette device; disposable devices include nonrechargeable and nonreusable e-cigarette devices 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.

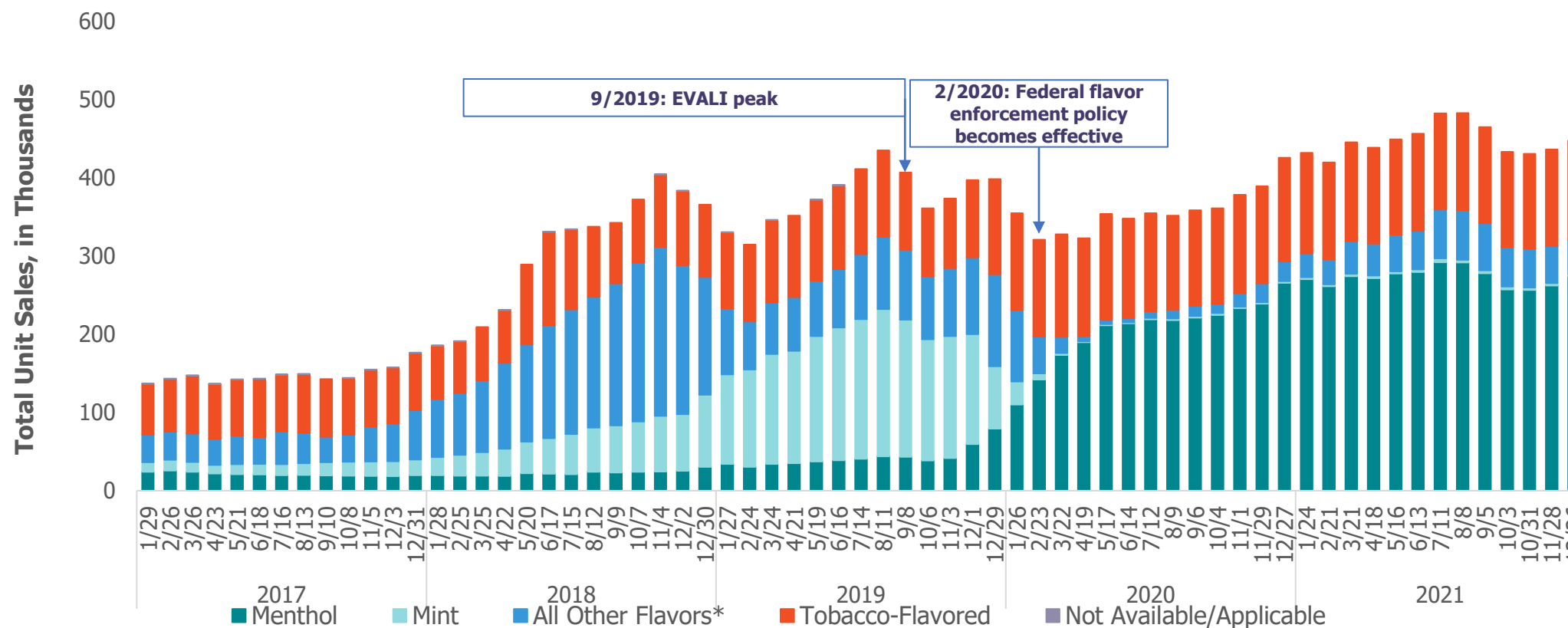
### Trends of Unit Sales by Product Following FDA’s Flavor Enforcement Policy

- 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 December 26, 2021:
  - Sales of disposable devices increased by 90.4% (from 172.8 thousand to 329.0 thousand); market share increased from 24.7% to 35.6%.
  - Sales of prefilled cartridges increased by 12.8% (from 527.6 thousand to 594.9 thousand); market share decreased from 75.3% to 64.4%.

**Figure 3. California E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates 1/2017 – 12/2021**



**Figure 4. Colorado E-Cigarette Unit Sales by Flavor, 4 Week Estimates 1/2017 – 12/2021\***

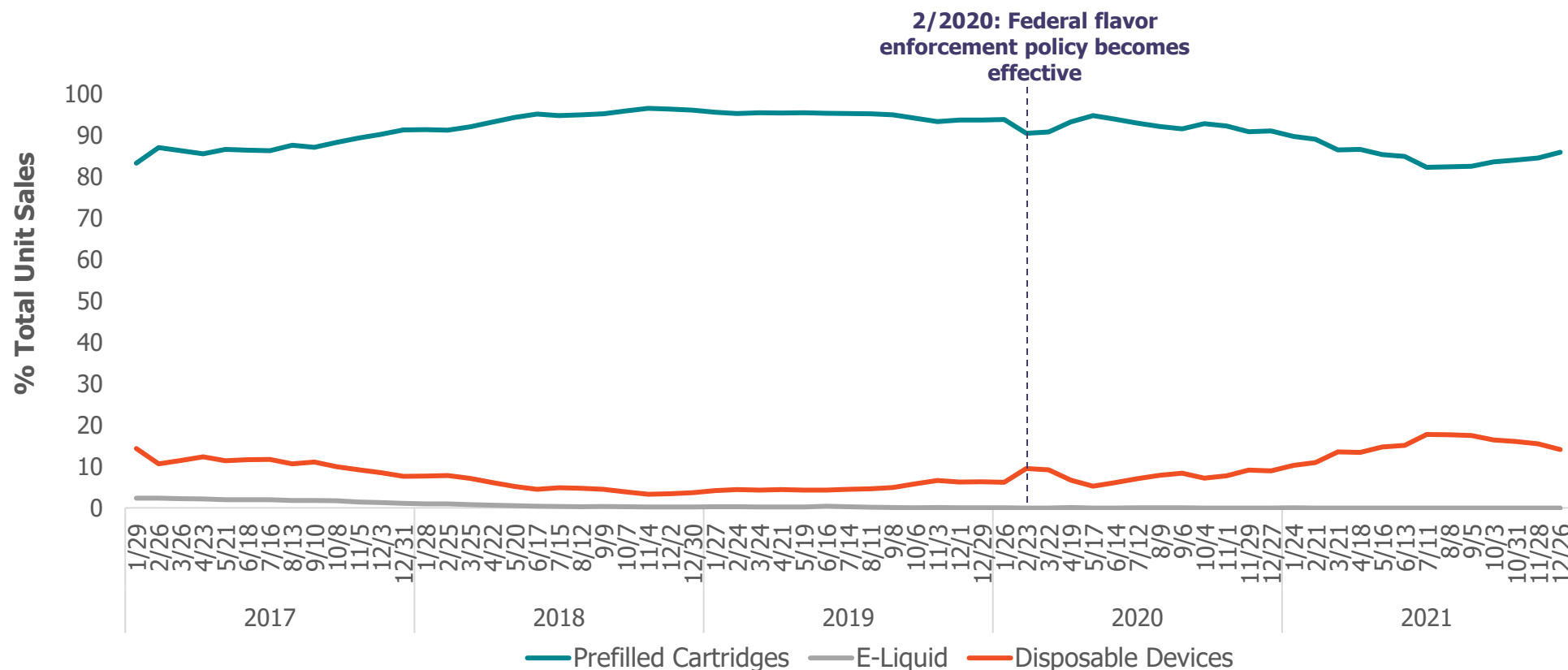


\*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; All Other Flavors category includes fruit, clove/spice, chocolate, alcoholic drink (such as wine, cognac, or other cocktails), candy/desserts/other sweets, some other flavor; e-cigarette accessories 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 December 26, 2021, monthly e-cigarette unit sales increased by 39.5% to 447.8 thousand units.
- From February 23, 2020 to December 26, 2021:
  - Menthol-flavored e-cigarette sales increased by 92.5% (from 142.2 thousand to 273.7 thousand); market share increased from 44.3% to 61.1%.
  - Tobacco-flavored e-cigarette sales increased by 2.3% (from 124.1 thousand to 126.9 thousand); market share decreased from 38.7% to 28.3%.
  - Mint-flavored e-cigarette sales decreased by 58.9% (from 7.7 thousand to 3.2 thousand); market share decreased from 2.4% to 0.7%.
  - All other-flavored e-cigarette sales decreased by 7.5% (from 47.0 thousand to 43.5 thousand); market share decreased from 14.6% to 9.7%.

**Figure 5. Colorado E-Cigarette Unit Sales by Product Type, 4 Week Estimates 1/2017 – 12/2021\***

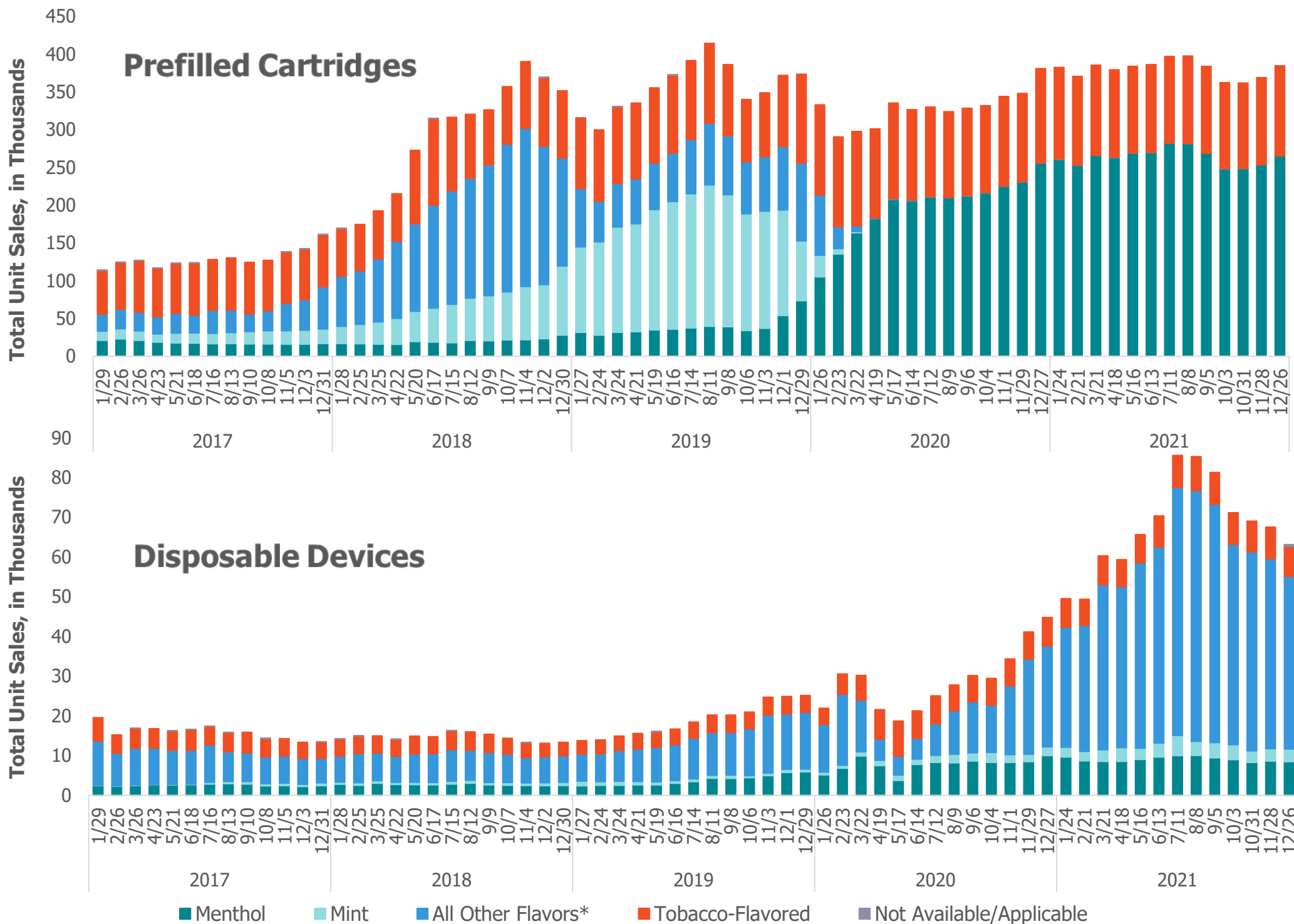


\*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; prefilled cartridges include tanks, cartridges, and pods used in rechargeable and reusable e-cigarette device; disposable devices include nonrechargeable and nonreusable e-cigarette devices 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**

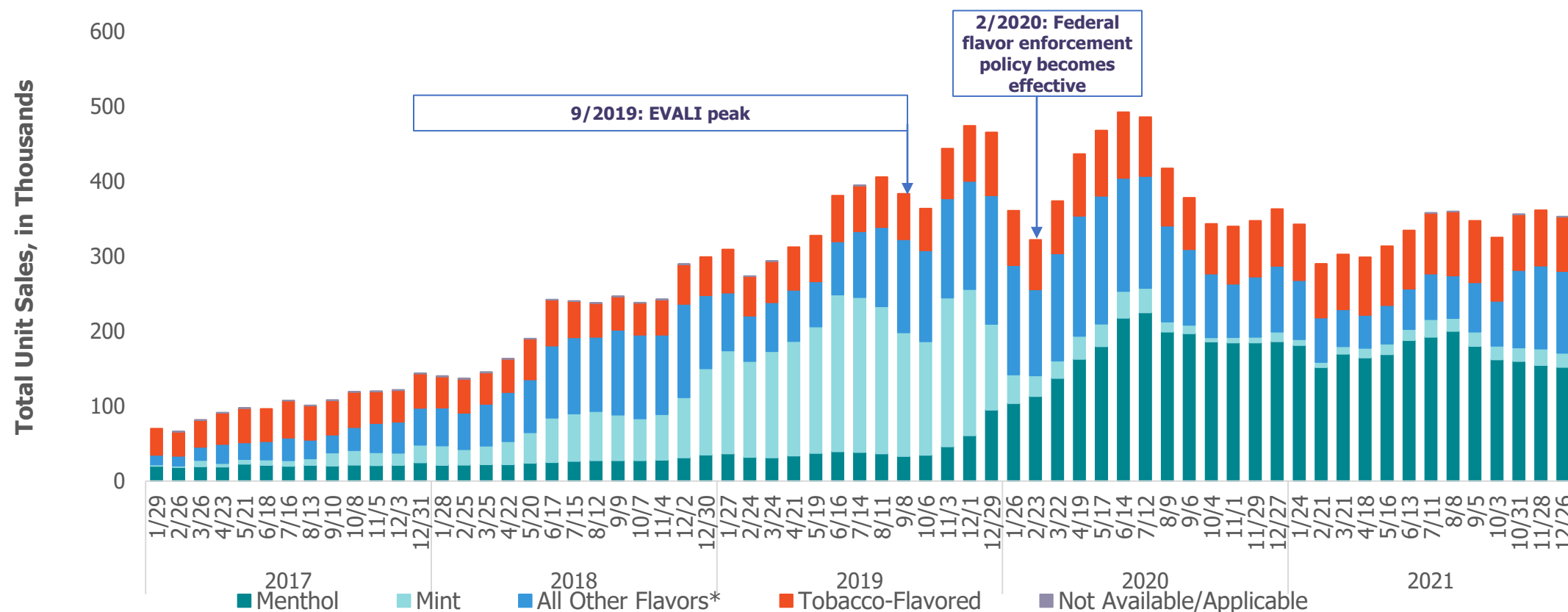
- Following FDA’s flavor enforcement policy, which prohibited the sale of flavored prefilled cartridges but exempted disposable devices and menthol and tobacco prefilled cartridges, between February 23, 2020 and December 26, 2021:
  - Sales of disposable devices increased by 106.5% (from 30.6 thousand to 63.1 thousand); market share increased from 9.5% to 14.1%.
  - Sales of prefilled cartridges increased by 32.4% (from 290.4 thousand to 384.6 thousand); market share decreased from 90.5% to 85.9%.

Figure 6. Colorado E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates 1/2017 – 12/2021





**Figure 7. Connecticut E-Cigarette Unit Sales by Flavor, 4 Week Estimates 1/2017 – 12/2021\***

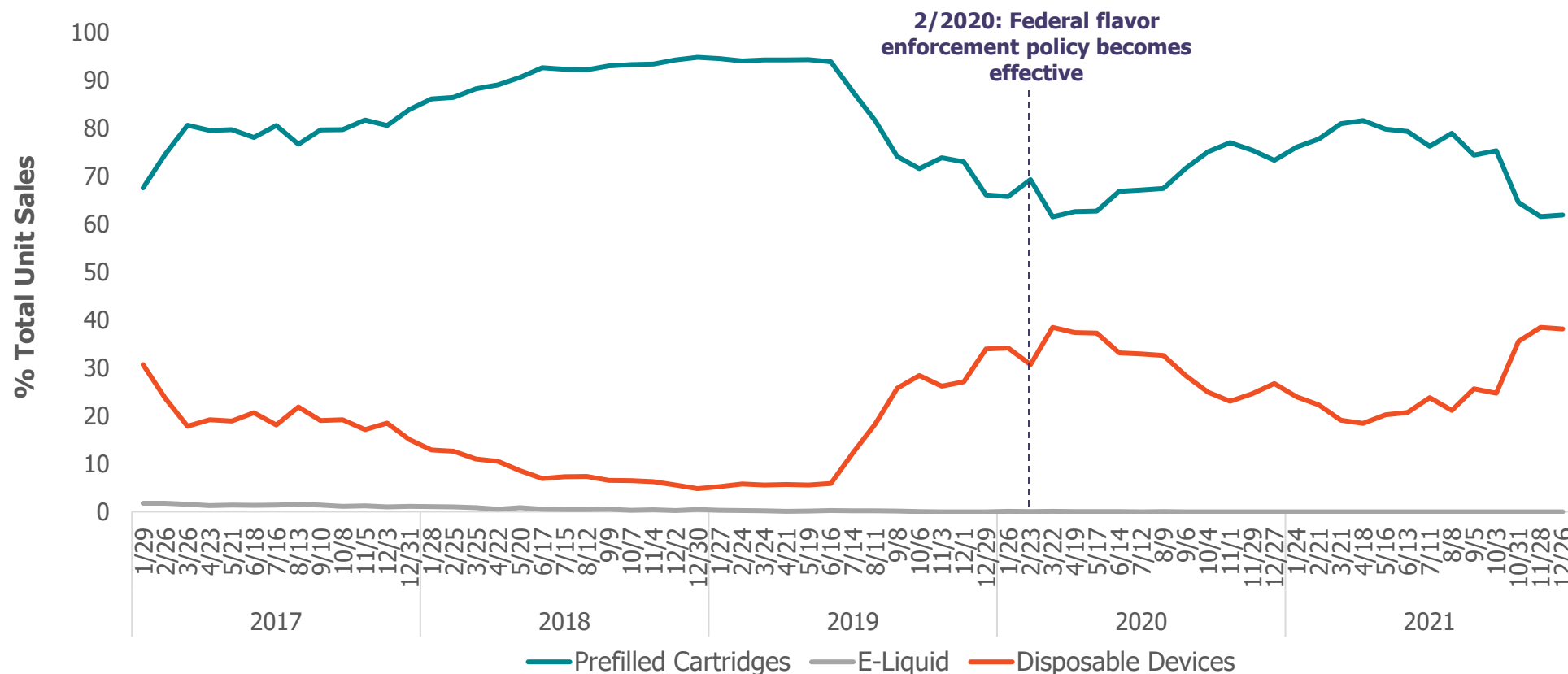


\*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; All Other Flavors category includes fruit, clove/spice, chocolate, alcoholic drink (such as wine, cognac, or other cocktails), candy/desserts/other sweets, some other flavor; e-cigarette accessories 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 December 26, 2021, monthly e-cigarette unit sales increased by 9.6% to 352.8 thousand units.
- From February 23, 2020 to December 26, 2021:
  - Menthol-flavored e-cigarette sales increased by 34.5% (from 113.2 thousand to 152.3 thousand); market share increased from 35.2% to 43.2%.
  - Tobacco-flavored e-cigarette sales increased by 9.7% (from 66.1 thousand to 72.5 thousand); market share increased from 20.5% to 20.6%.
  - Mint-flavored e-cigarette sales decreased by 31.8% (from 27.5 thousand to 18.7 thousand); market share decreased from 8.5% to 5.3%.
  - All other-flavored e-cigarette sales decreased by 5.1% (from 115.0 thousand to 109.1 thousand); market share decreased from 35.7% to 30.9%.

**Figure 8. Connecticut E-Cigarette Unit Sales by Product Type, 4 Week Estimates 1/2017 – 12/2021\***

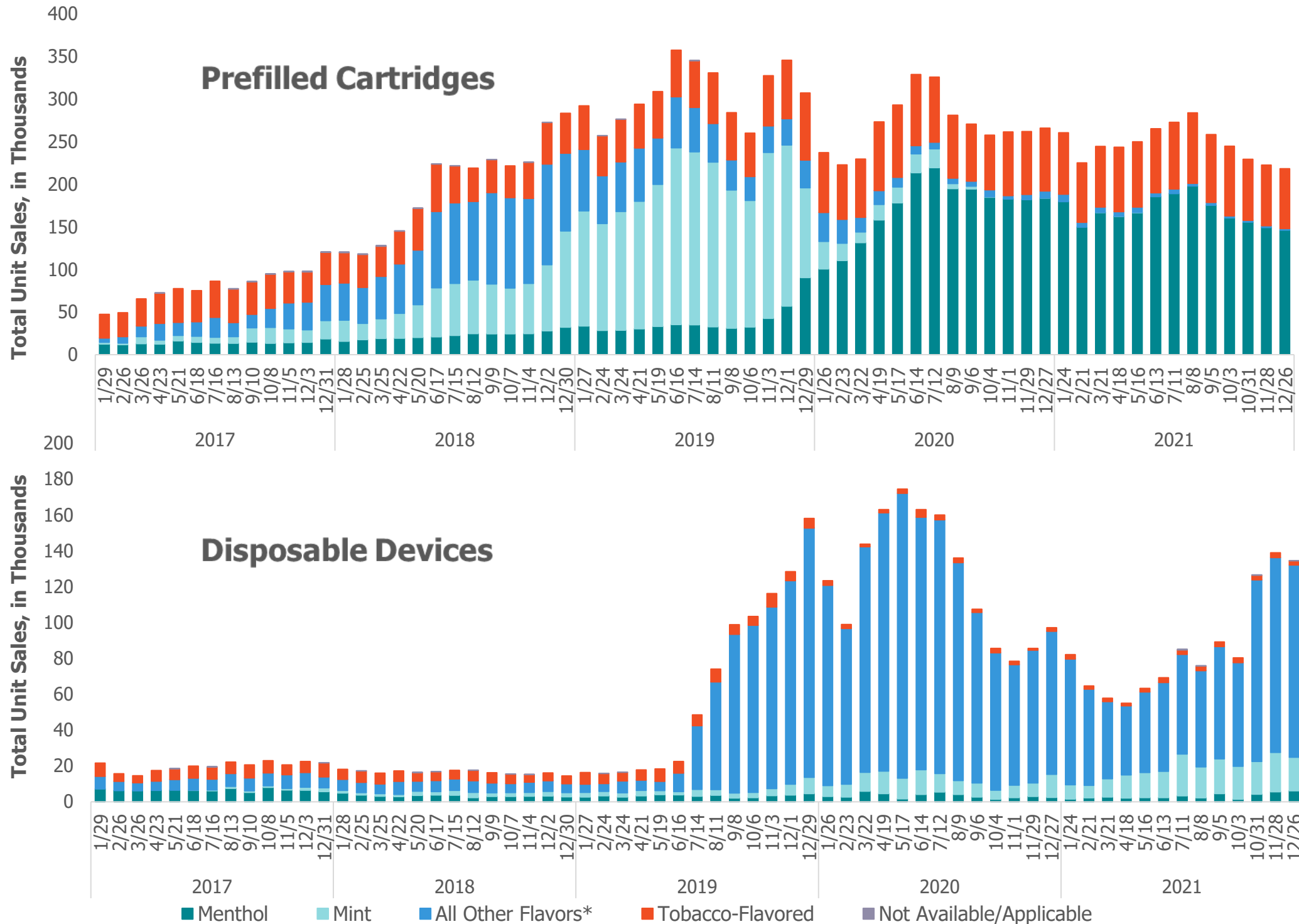


\*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; prefilled cartridges include tanks, cartridges, and pods used in rechargeable and reusable e-cigarette device; disposable devices include nonrechargeable and nonreusable e-cigarette devices 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.

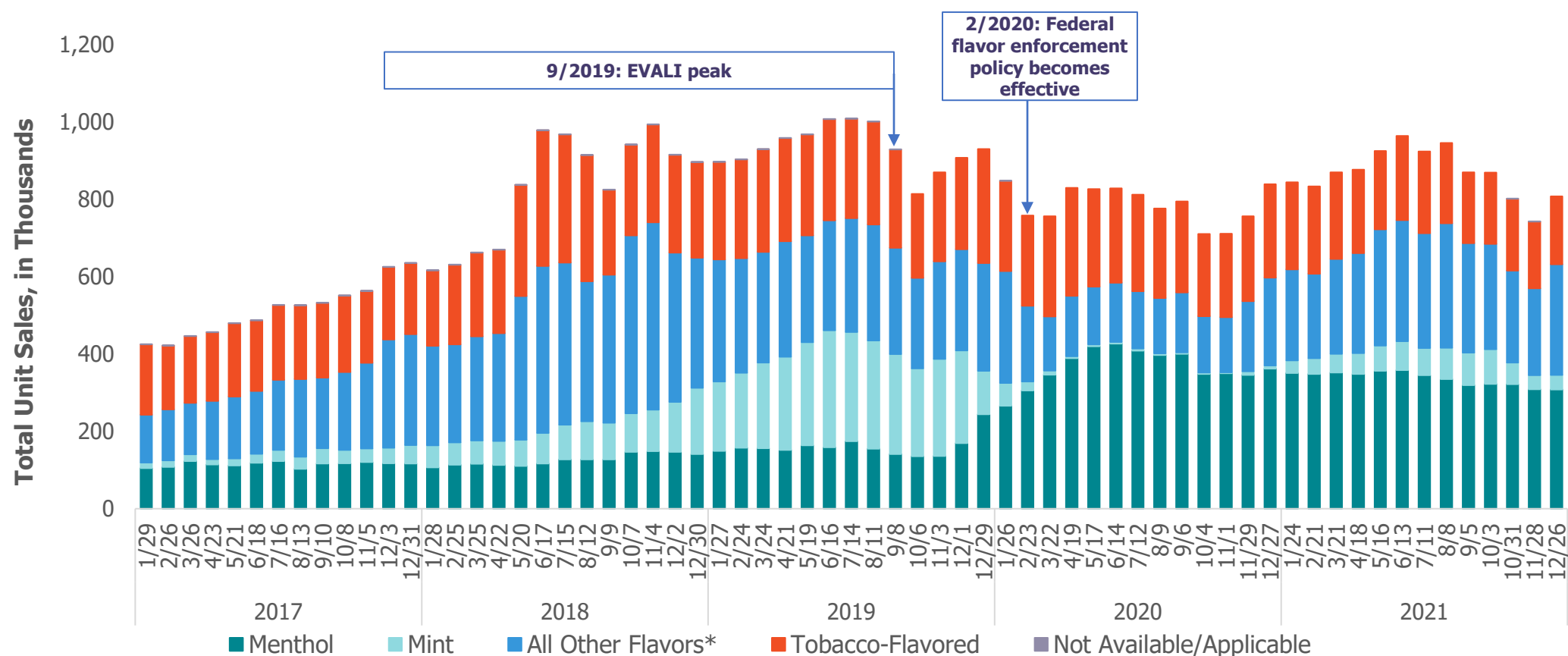
**Trends of Unit Sales by Product Following FDA’s Flavor Enforcement Policy**

- 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 December 26, 2021:
  - Sales of disposable devices increased by 36.1% (from 98.8 thousand to 134.5 thousand); market share increased from 30.7% to 38.1%.
  - Sales of prefilled cartridges decreased by 2.1% (from 222.9 thousand to 218.3 thousand); market share decreased from 69.2% to 61.9%.

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



**Figure 10. Illinois E-Cigarette Unit Sales by Flavor, 4 Week Estimates 1/2017 – 12/2021\***

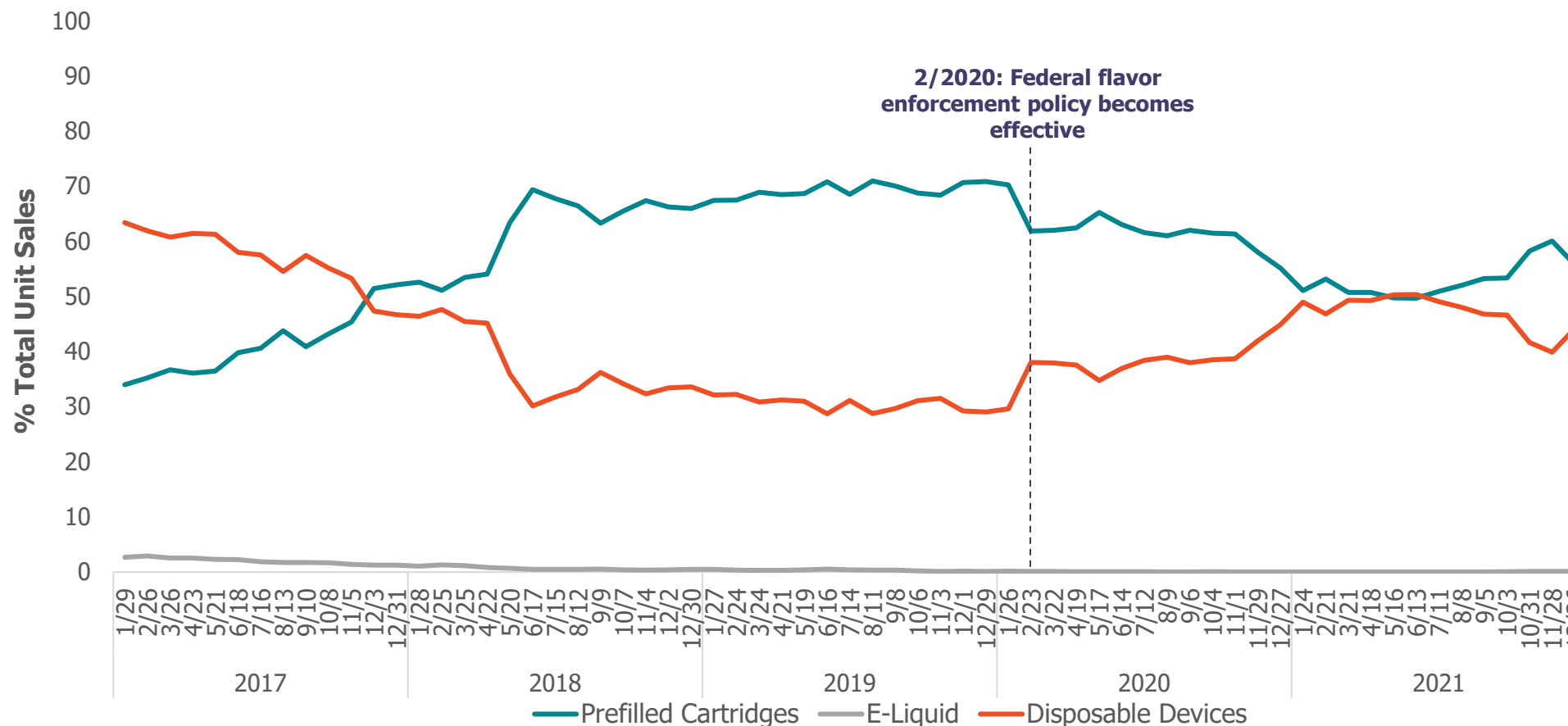


\*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; All Other Flavors category includes fruit, clove/spice, chocolate, alcoholic drink (such as wine, cognac, or other cocktails), candy/desserts/other sweets, some other flavor; e-cigarette accessories 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 December 26, 2021, monthly e-cigarette unit sales increased by 6.6% to 807.8 thousand units.
- From February 23, 2020 to December 26, 2021:
  - Menthol-flavored e-cigarette sales increased by 0.9% (from 305.6 thousand to 308.4 thousand); market share decreased from 40.3% to 38.2%.
  - Tobacco-flavored e-cigarette sales decreased by 24.7% (from 233.5 thousand to 175.8 thousand); market share decreased from 30.8% to 21.8%.
  - Mint-flavored e-cigarette sales increased by 61.5% (from 23.1 thousand to 37.2 thousand); market share increased from 3.0% to 4.6%.
  - All other-flavored e-cigarette sales increased by 46.2% (from 195.9 thousand to 286.4 thousand); market share increased from 25.8% to 35.5%.

**Figure 11. Illinois E-Cigarette Unit Sales by Product Type, 4 Week Estimates 1/2017 – 12/2021\***

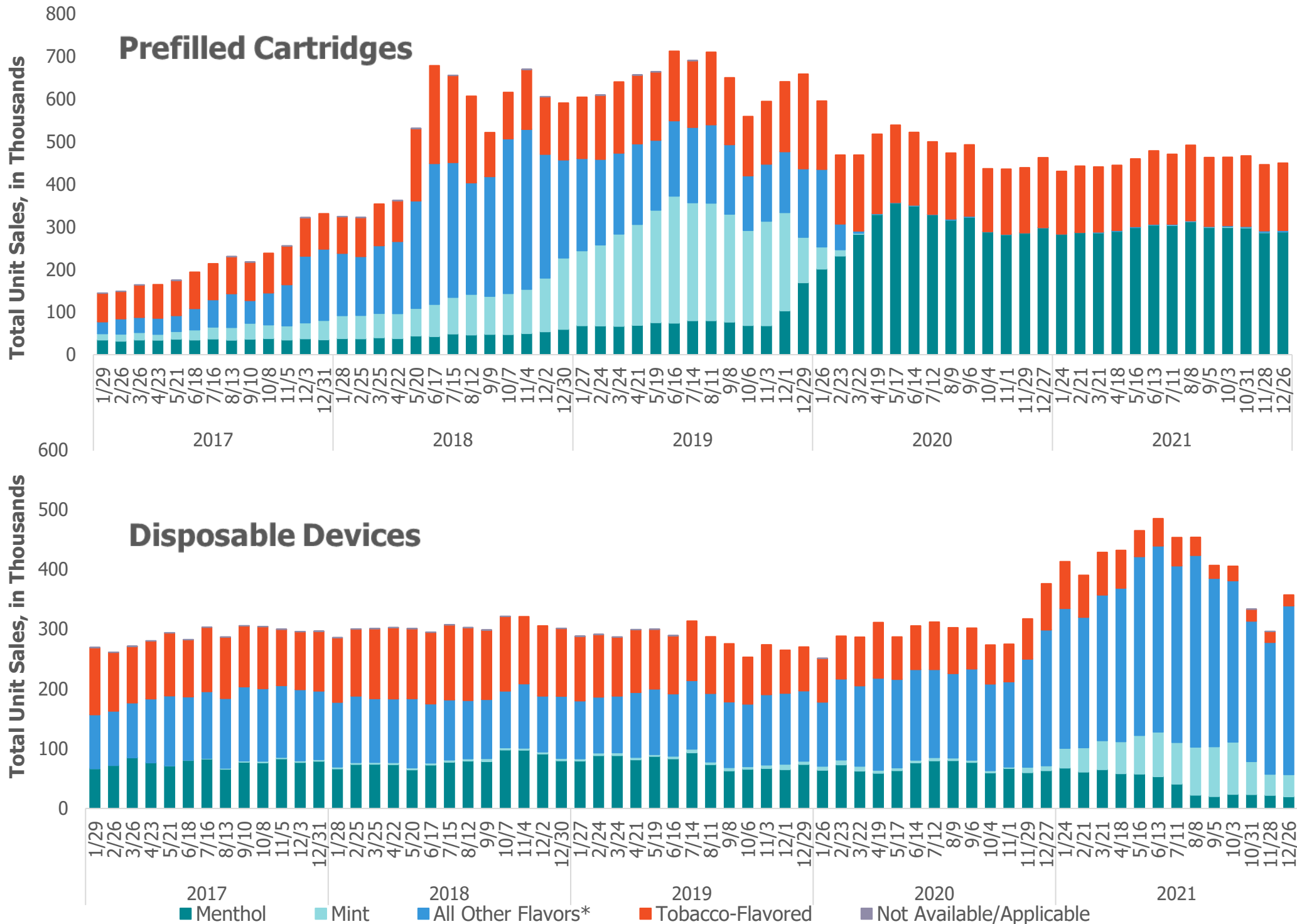


\*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; prefilled cartridges include tanks, cartridges, and pods used in rechargeable and reusable e-cigarette device; disposable devices include nonrechargeable and nonreusable e-cigarette devices 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.

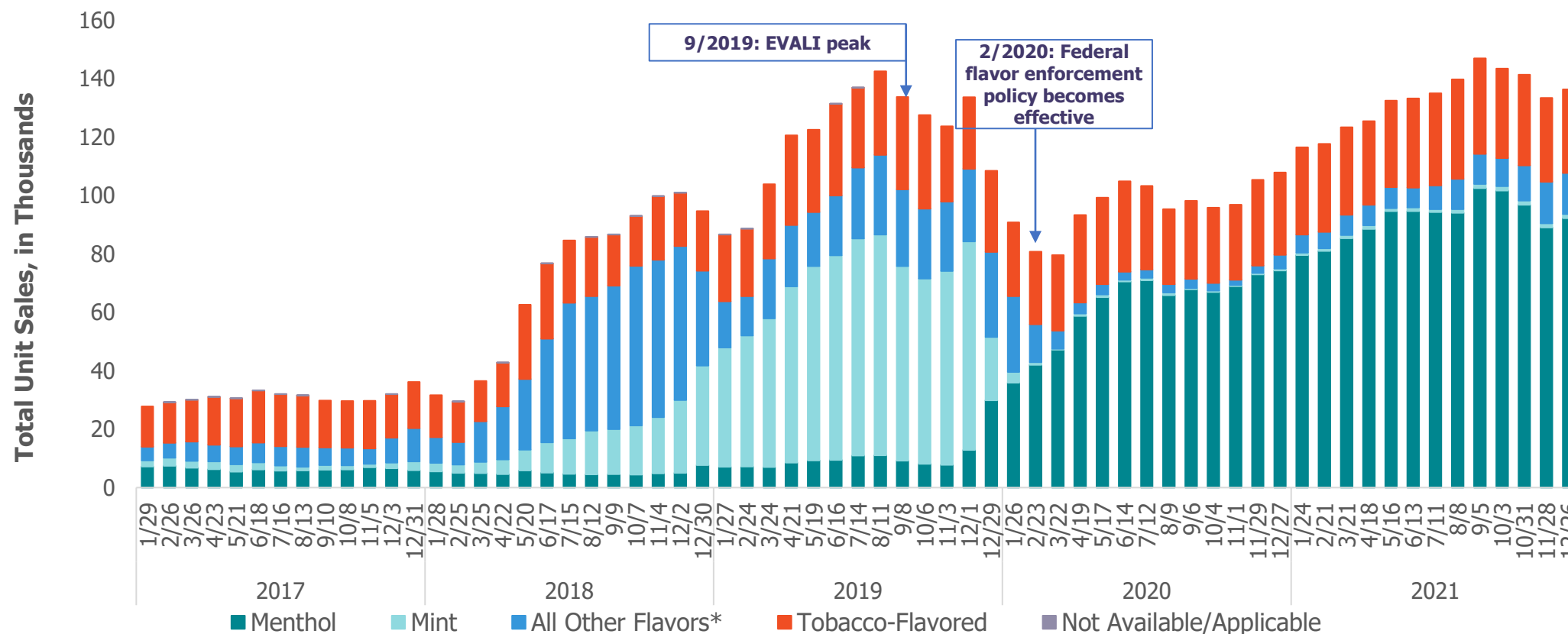
### Trends of Unit Sales by Product Following FDA’s Flavor Enforcement Policy

- 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 December 26, 2021:
  - Sales of disposable devices increased by 23.8% (from 288.3 thousand to 357.1 thousand); market share increased from 38.0% to 44.2%.
  - Sales of prefilled cartridges decreased by 4.0% (from 468.9 thousand to 450.0 thousand); market share decreased from 61.9% to 55.7%.

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



**Figure 13. Maine E-Cigarette Unit Sales by Flavor, 4 Week Estimates 1/2017 – 12/2021\***

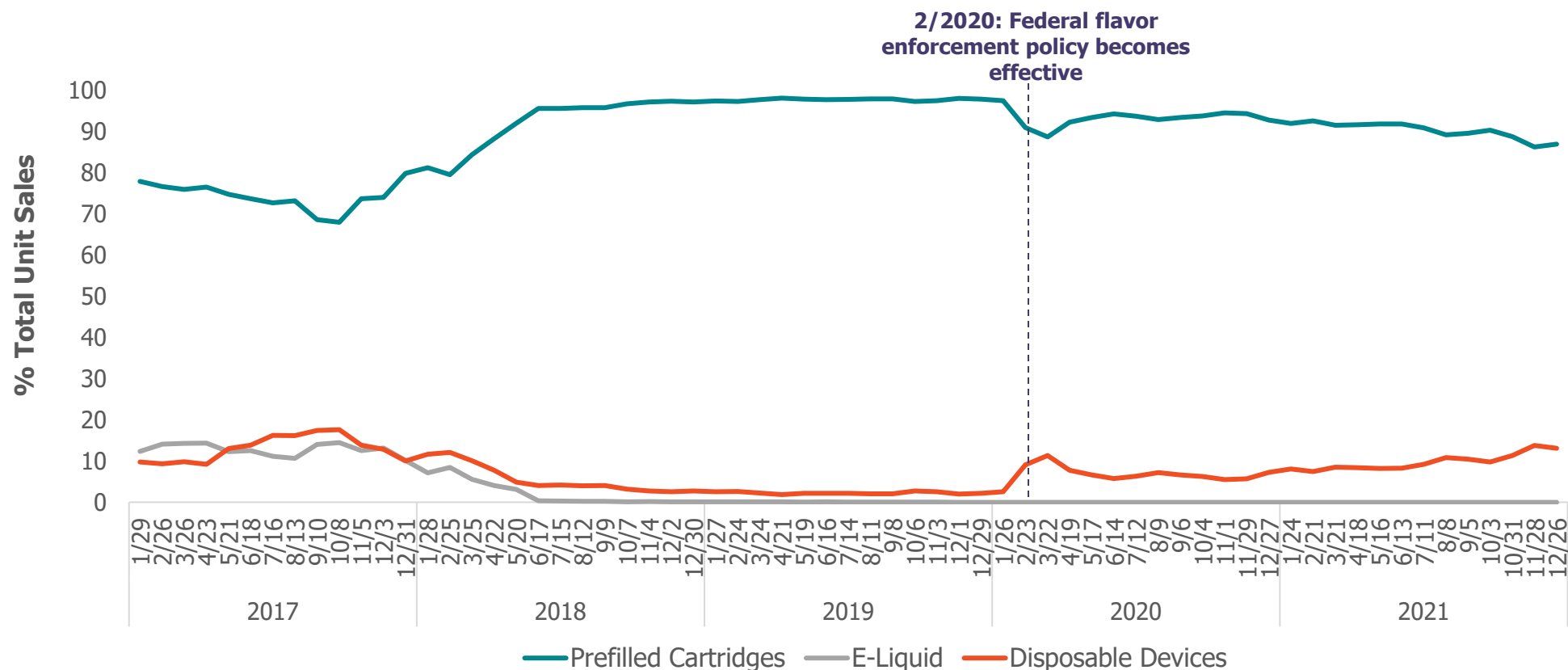


\*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; All Other Flavors category includes fruit, clove/spice, chocolate, alcoholic drink (such as wine, cognac, or other cocktails), candy/desserts/other sweets, some other flavor; e-cigarette accessories 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 December 26, 2021, monthly e-cigarette unit sales increased by 68.9% to 136.3 thousand units.
- From February 23, 2020 to December 26, 2021:
  - Menthol-flavored e-cigarette sales increased by 119.3% (from 42.0 thousand to 92.2 thousand); market share increased from 52.1% to 67.6%.
  - Tobacco-flavored e-cigarette sales increased by 15.2% (from 24.9 thousand to 28.6 thousand); market share decreased from 30.8% to 21.0%.
  - Mint-flavored e-cigarette sales increased by 63.5% (from 0.9 thousand to 1.5 thousand); market share decreased from 1.1% to 1.07%.
  - All other-flavored e-cigarette sales increased by 8.6% (from 13.0 thousand to 14.1 thousand); market share decreased from 16.0% to 10.3%.

**Figure 14. Maine E-Cigarette Unit Sales by Product Type, 4 Week Estimates 1/2017 – 12/2021\***



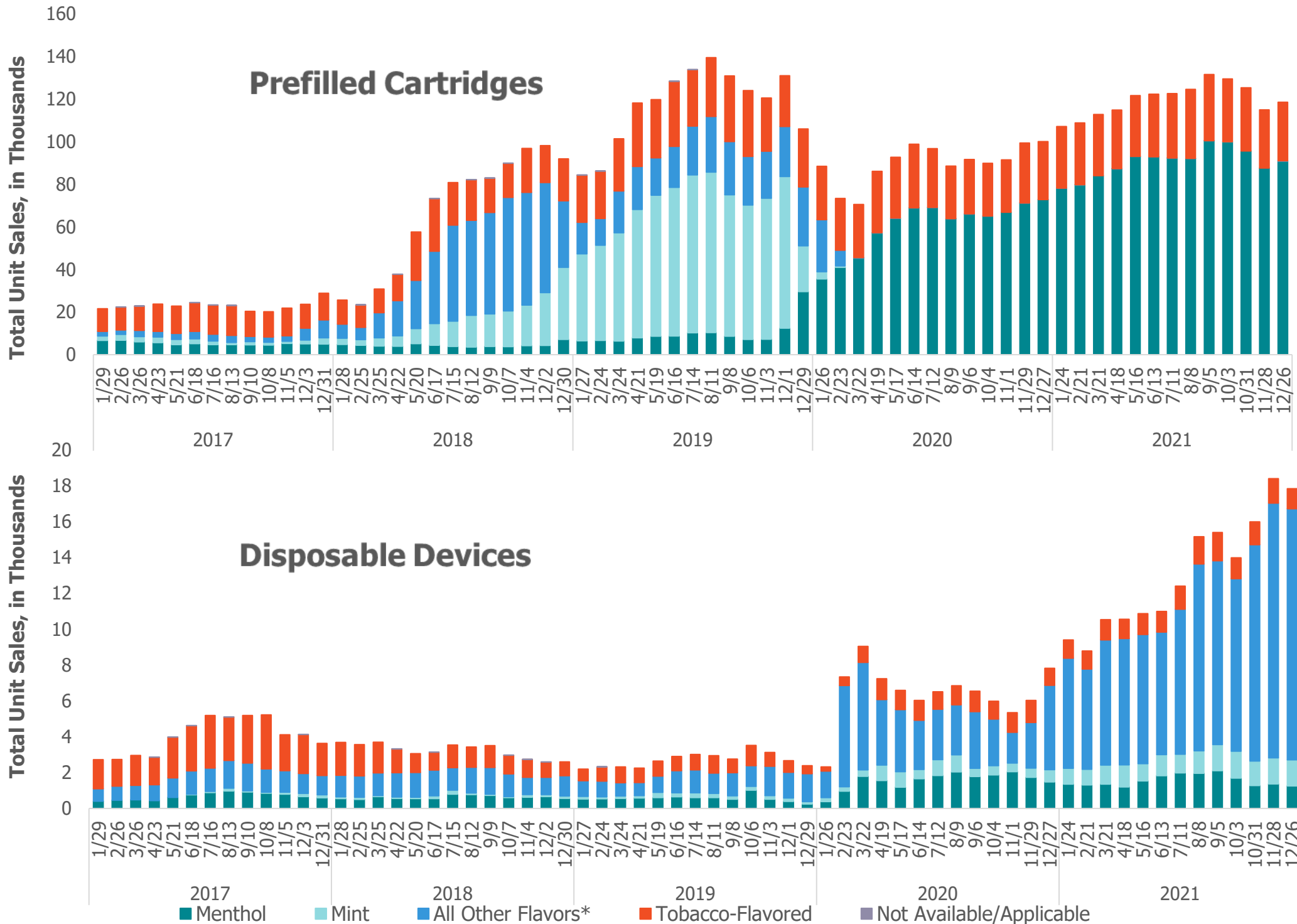
\*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; prefilled cartridges include tanks, cartridges, and pods used in rechargeable and reusable e-cigarette device; disposable devices include nonrechargeable and nonreusable e-cigarette devices 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

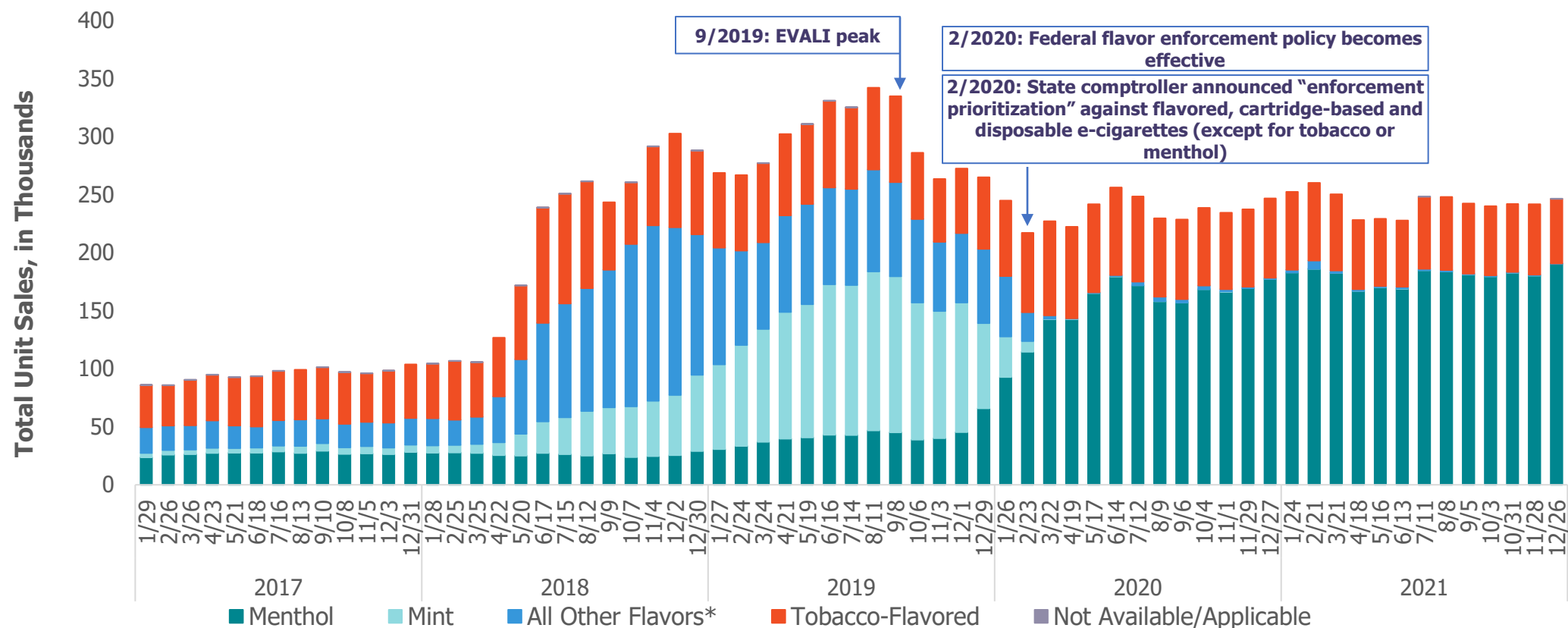
- Following FDA’s flavor enforcement policy, which prohibited the sale of flavored prefilled cartridges but exempted disposable devices and menthol and tobacco prefilled cartridges, between February 23, 2020 and December 26, 2021:
  - Sales of disposable devices increased by 143.0% (from 7.3 thousand to 17.8 thousand); market share increased from 9.1% to 13.1%.
  - Sales of prefilled cartridges increased by 61.5% (from 73.4 thousand to 118.5 thousand); market share decreased from 90.9% to 86.9%.



**Figure 15. Maine E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates 1/2017 – 12/2021**



**Figure 16. Maryland E-Cigarette Unit Sales by Flavor, 4 Week Estimates 1/2017 – 12/2021\***

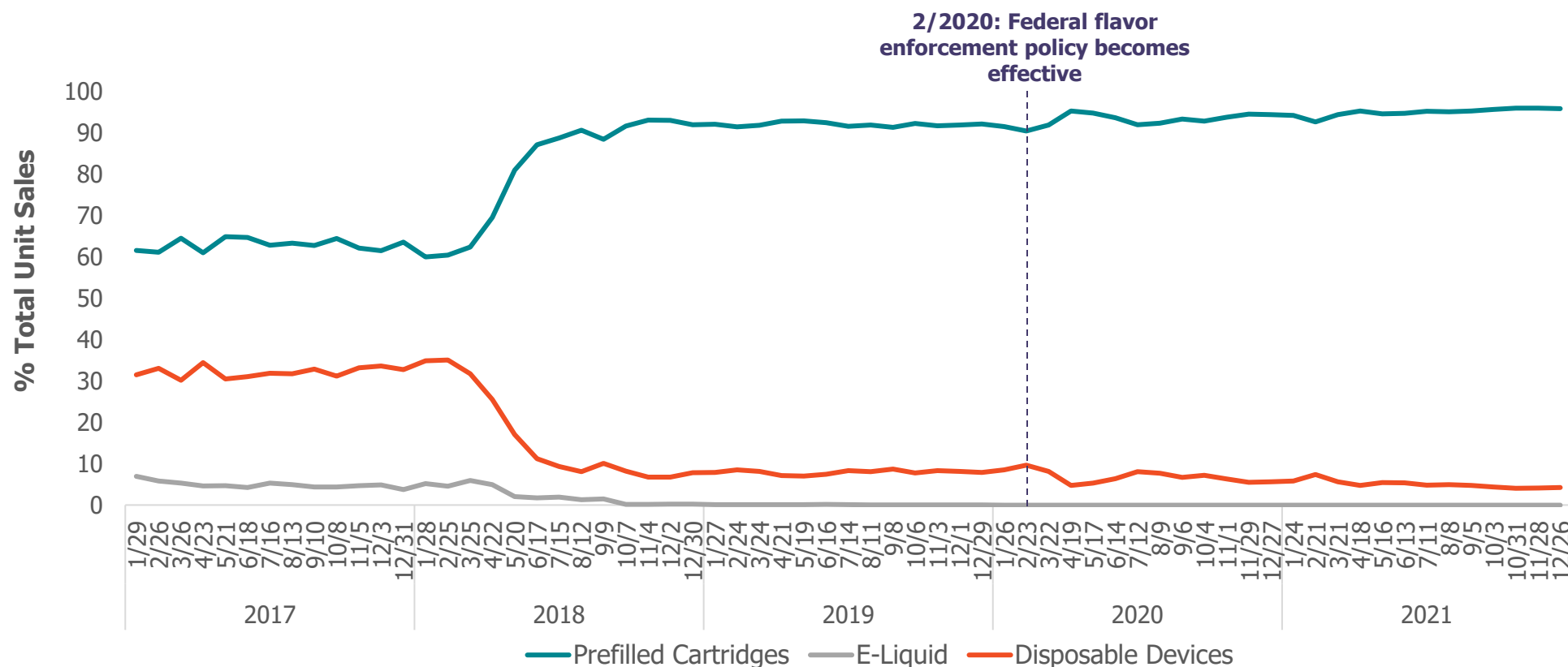


\*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; All Other Flavors category includes fruit, clove/spice, chocolate, alcoholic drink (such as wine, cognac, or other cocktails), candy/desserts/other sweets, some other flavor; e-cigarette accessories 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 December 26, 2021, monthly e-cigarette unit sales increased by 13.5% to 246.4 thousand units.
- From February 23, 2020 to December 26, 2021:
  - Menthol-flavored e-cigarette sales increased by 66.0% (from 114.6 thousand to 190.2 thousand); market share increased from 52.8% to 77.2%.
  - Tobacco-flavored e-cigarette sales decreased by 18.8% (from 68.5 thousand to 55.6 thousand); market share decreased from 31.6% to 22.6%.
  - Mint-flavored e-cigarette sales decreased by 99.8% (from 9.1 thousand to 0.0 thousand); market share decreased from 4.2% to 0.0%.
  - All other-flavored e-cigarette sales decreased by 97.9% (from 24.9 thousand to 0.5 thousand); market share decreased from 11.5% to 0.2%.

**Figure 17. Maryland E-Cigarette Unit Sales by Product Type, 4 Week Estimates 1/2017 – 12/2021\***

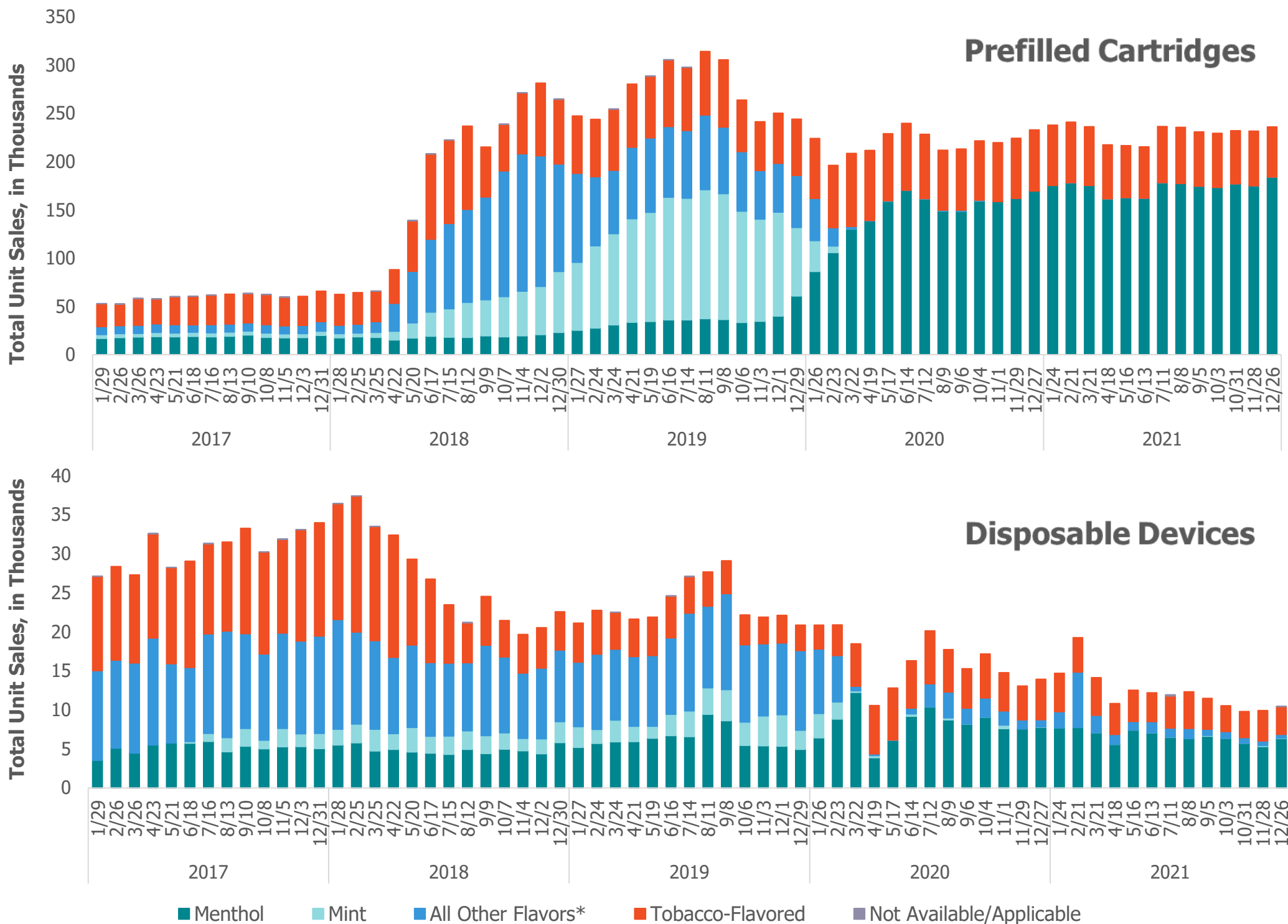


\*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; prefilled cartridges include tanks, cartridges, and pods used in rechargeable and reusable e-cigarette device; disposable devices include nonrechargeable and nonreusable e-cigarette devices 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.

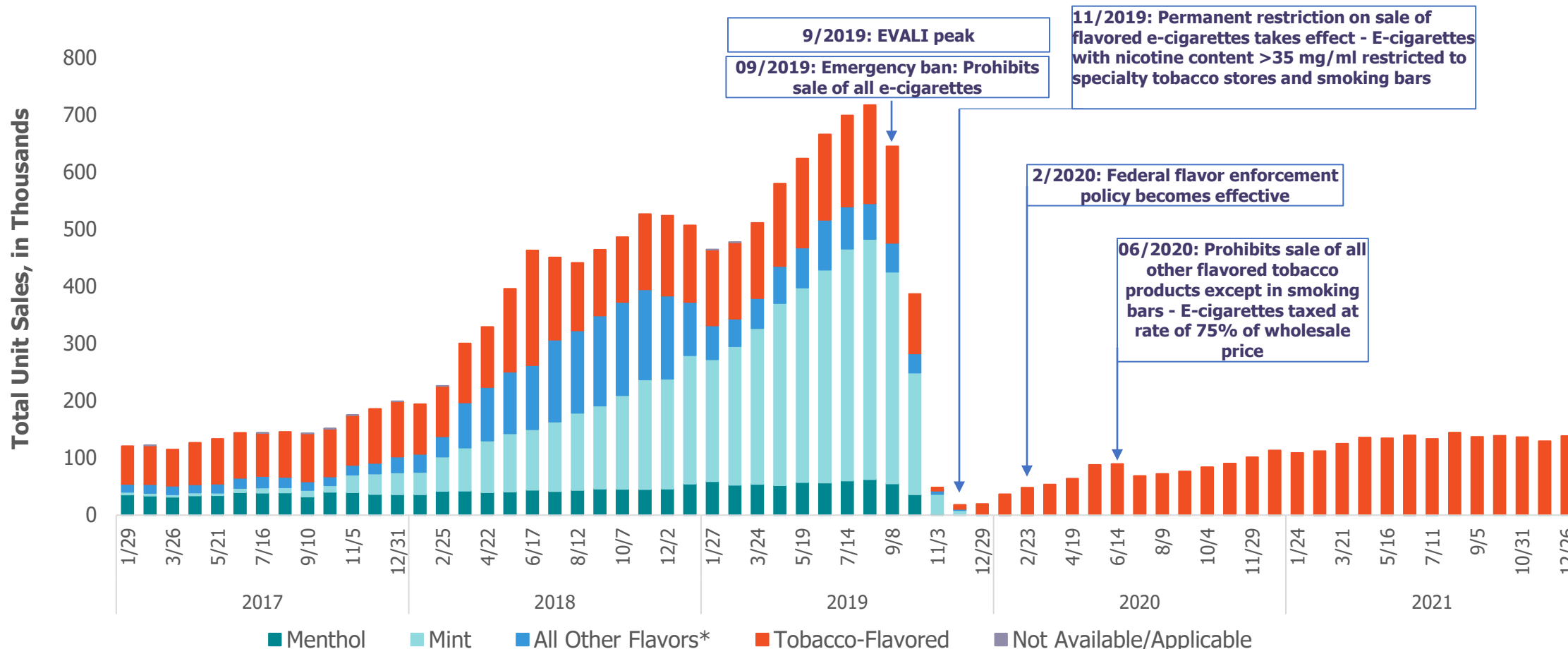
### Trends of Unit Sales by Product Following FDA’s Flavor Enforcement Policy

- 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 December 26, 2021:
  - Sales of disposable devices decreased by 50.2% (from 20.9 thousand to 10.4 thousand); market share decreased from 9.6% to 4.2%.
  - Sales of prefilled cartridges increased by 20.3% (from 196.3 thousand to 236.0 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 1/2017 – 12/2021



**Figure 19. Massachusetts E-Cigarette Unit Sales by Flavor, 4 Week Estimates 1/2017 – 12/2021\***

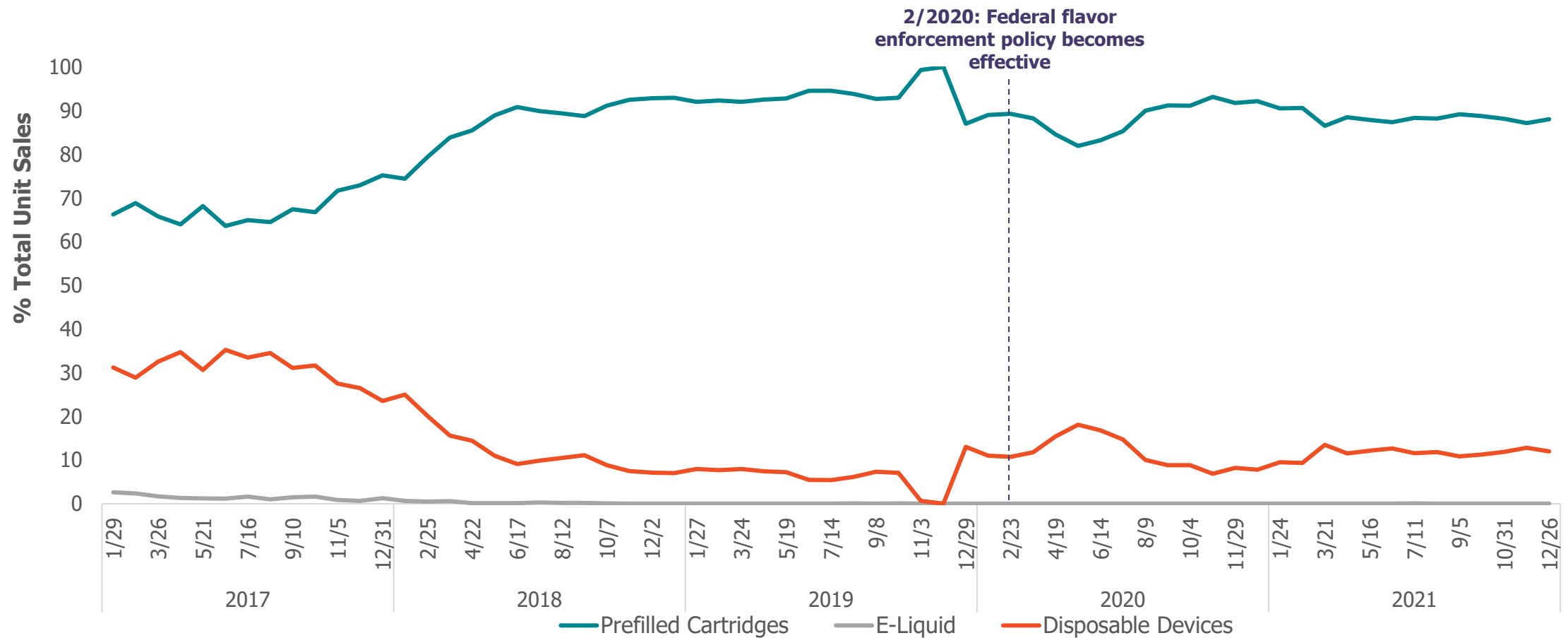


\*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; All Other Flavors category includes fruit, clove/spice, chocolate, alcoholic drink (such as wine, cognac, or other cocktails), candy/desserts/other sweets, some other flavor; e-cigarette accessories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

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

- Following Massachusetts's flavored e-cigarette restrictions, monthly e-cigarette total unit sales decreased by 78.5% from September 8, 2019 to December 26, 2021 (from 645.2 thousand to 138.5 thousand).
- From September 8, 2019 to December 26, 2021:
  - Menthol-flavored e-cigarette sales decreased by 98.6% (from 55.3 thousand to 0.8 thousand); market share decreased from 8.6% to 0.6%.
  - Tobacco-flavored e-cigarette sales decreased by 18.6% (from 169.0 thousand to 137.6 thousand); market share increased from 26.2% to 99.3%.
  - 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 99.7% (from 50.6 thousand to 0.2 thousand); market share decreased from 7.8% to 0.1%.

**Figure 20. Massachusetts E-Cigarette Unit Sales by Product Type, 4 Week Estimates 1/2017 – 12/2021\***

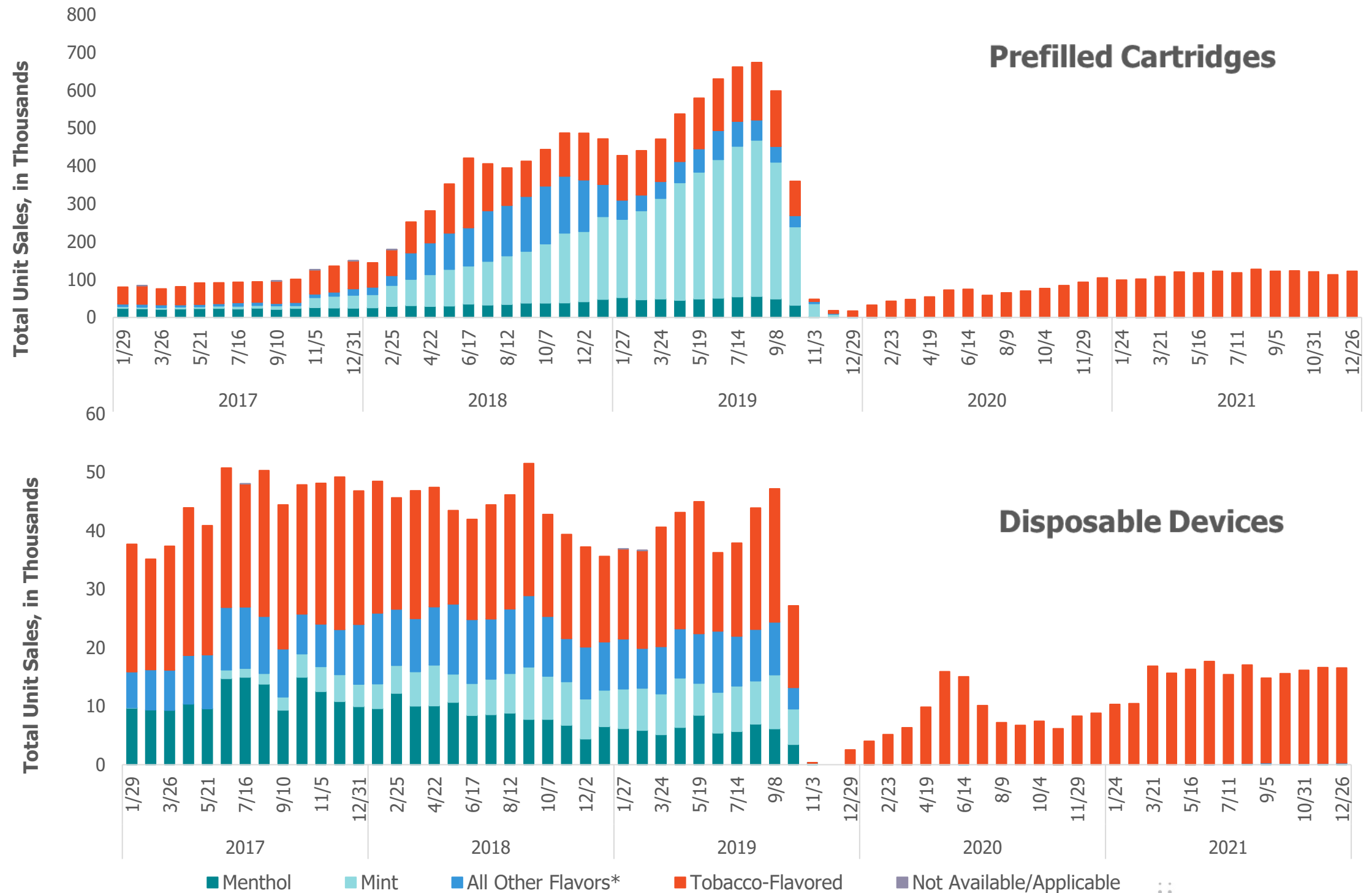


\*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; prefilled cartridges include tanks, cartridges, and pods used in rechargeable and reusable e-cigarette device; disposable devices include nonrechargeable and nonreusable e-cigarette devices 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.

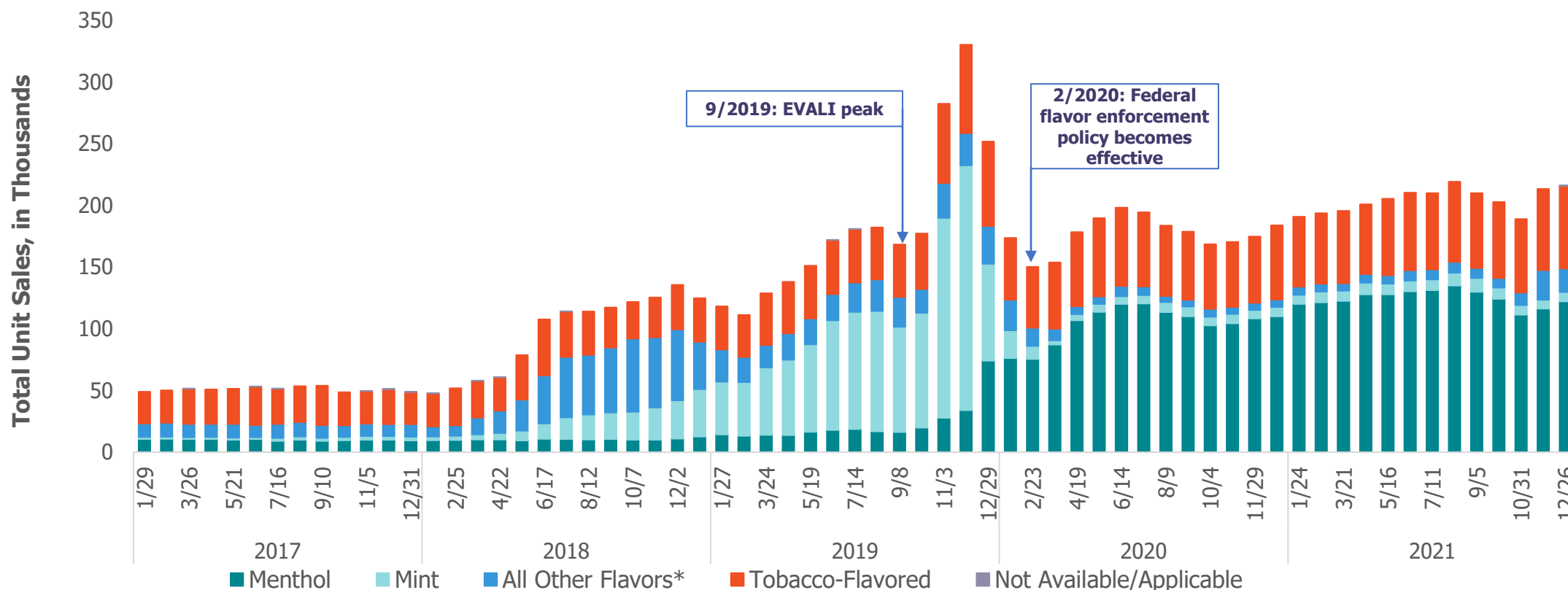
### Trends of Unit Sales by Product Following FDA’s Flavor Enforcement Policy

- 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 December 26, 2021:
  - Sales of disposable devices increased by 220.2% (from 5.2 thousand to 16.6 thousand); market share increased from 10.7% to 12.0%.
  - Sales of prefilled cartridges increased by 183.5% (from 43.0 thousand to 122.0 thousand); market share decreased from 89.3% to 88.0%.

**Figure 21. Massachusetts E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates 1/2017 – 12/2021**



**Figure 22. New Hampshire E-Cigarette Unit Sales by Flavor, 4 Week Estimates 1/2017 – 12/2021\***



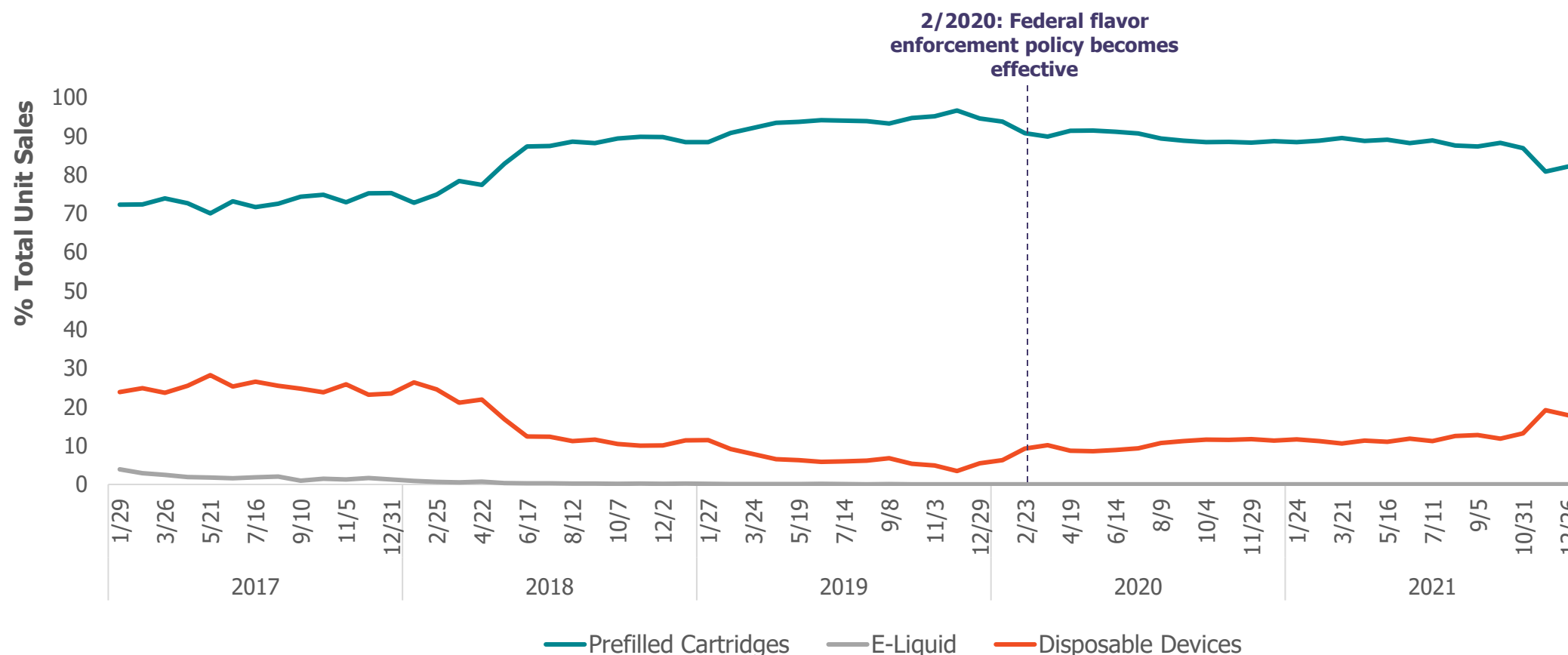
\*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; All Other Flavors category includes fruit, clove/spice, chocolate, alcoholic drink (such as wine, cognac, or other cocktails), candy/desserts/other sweets, some other flavor; e-cigarette accessories 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 December 26, 2021, monthly e-cigarette unit sales increased by 43.8% to 216.0 thousand units.
- From February 23, 2020 to December 26, 2021:
  - Menthol-flavored e-cigarette sales increased by 61.9% (from 75.5 thousand to 122.2 thousand); market share increased from 50.3% to 56.6%.
  - Tobacco-flavored e-cigarette sales increased by 36.0% (from 49.4 thousand to 67.3 thousand); market share decreased from 32.9% to 31.1%.
  - Mint-flavored e-cigarette sales decreased by 29.0% (from 10.6 thousand to 7.5 thousand); market share decreased from 7.1% to 3.5%.
  - All other-flavored e-cigarette sales increased by 29.8% (from 14.6 thousand to 19.0 thousand); market share decreased from 9.7% to 8.8%.



**Figure 23. New Hampshire E-Cigarette Unit Sales by Product Type, 4 Week Estimates 1/2017 – 12/2021\***

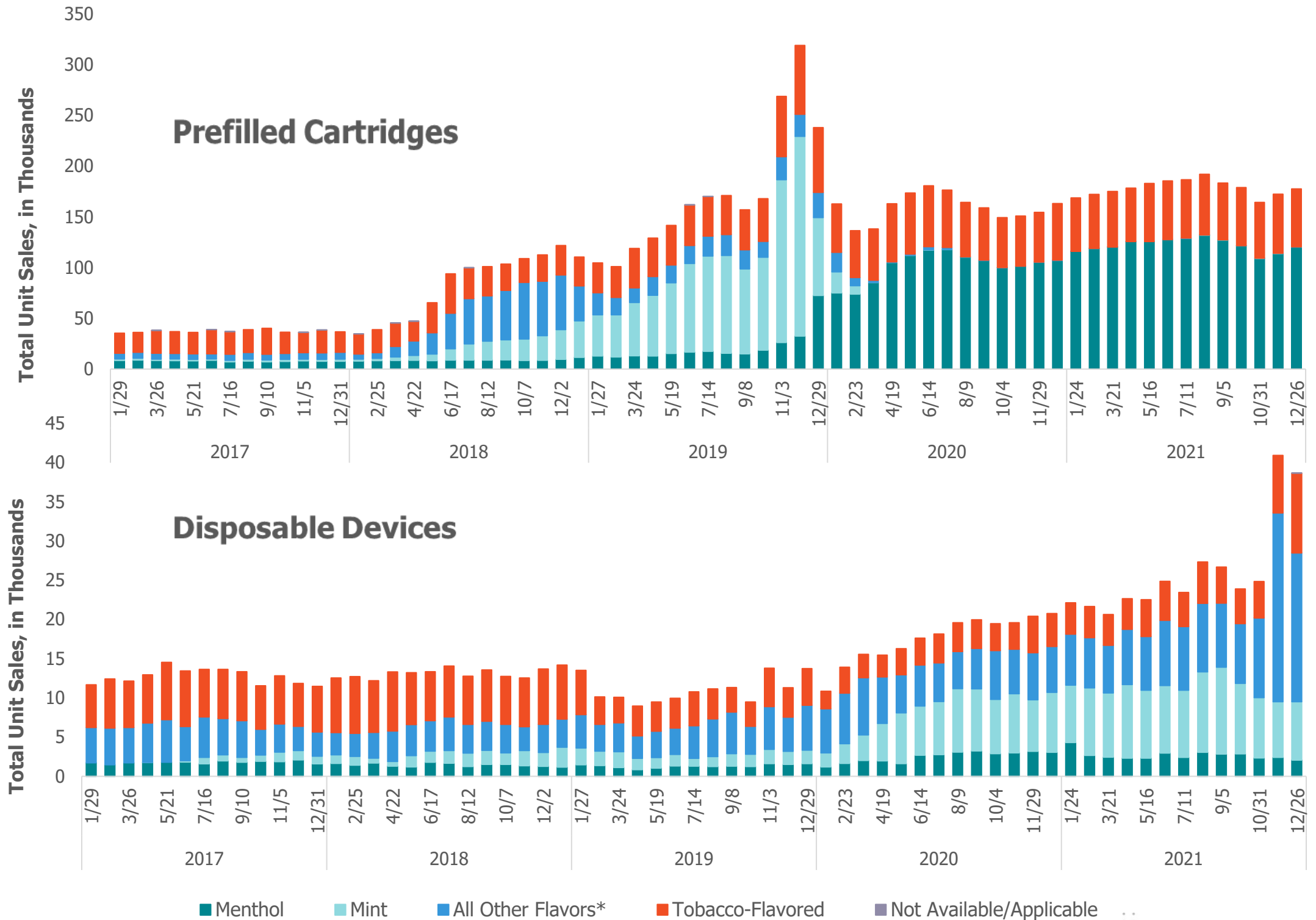


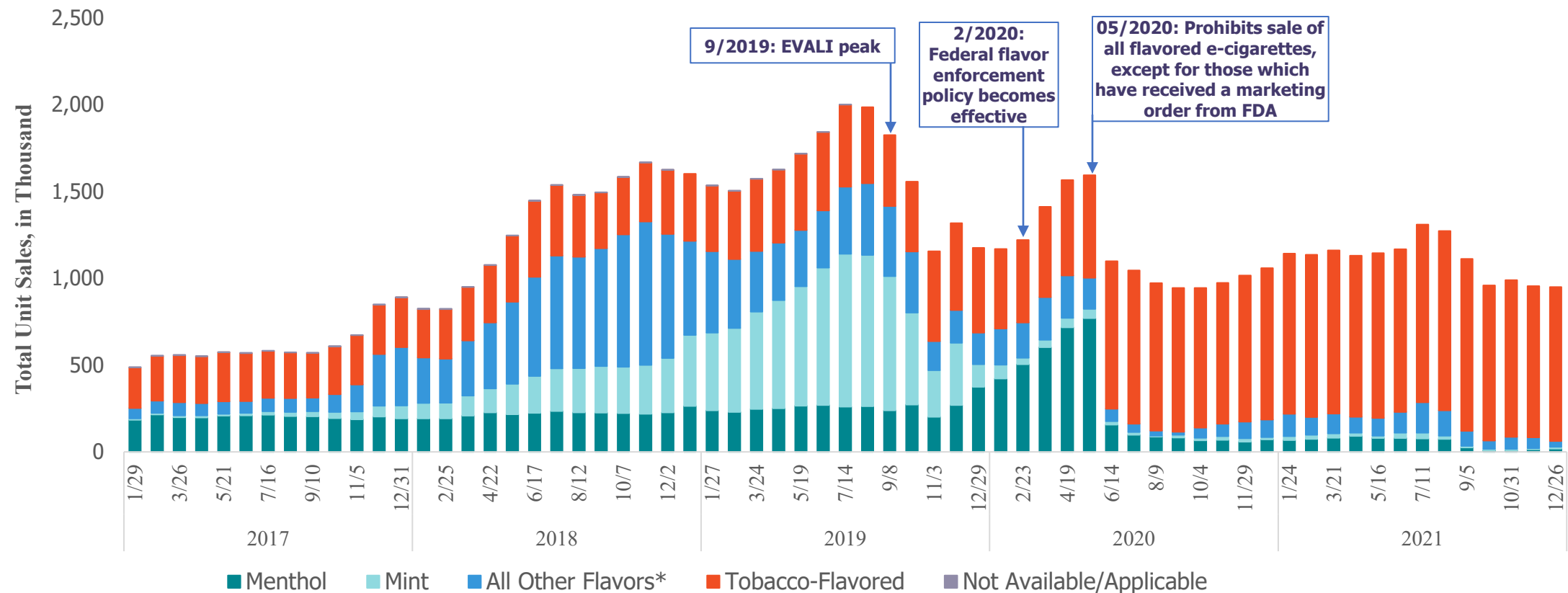
\*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; prefilled cartridges include tanks, cartridges, and pods used in rechargeable and reusable e-cigarette device; disposable devices include nonrechargeable and nonreusable e-cigarette devices 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 December 26, 2021:
  - Sales of disposable devices increased by 177.8% (from 13.9 thousand to 38.6 thousand); market share increased from 9.3% to 17.9%.
  - Sales of prefilled cartridges increased by 30.2% (from 136.3 thousand to 177.4 thousand); market share decreased from 90.7% to 82.1%.

**Figure 24. New Hampshire E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates 1/2017 – 12/2021**



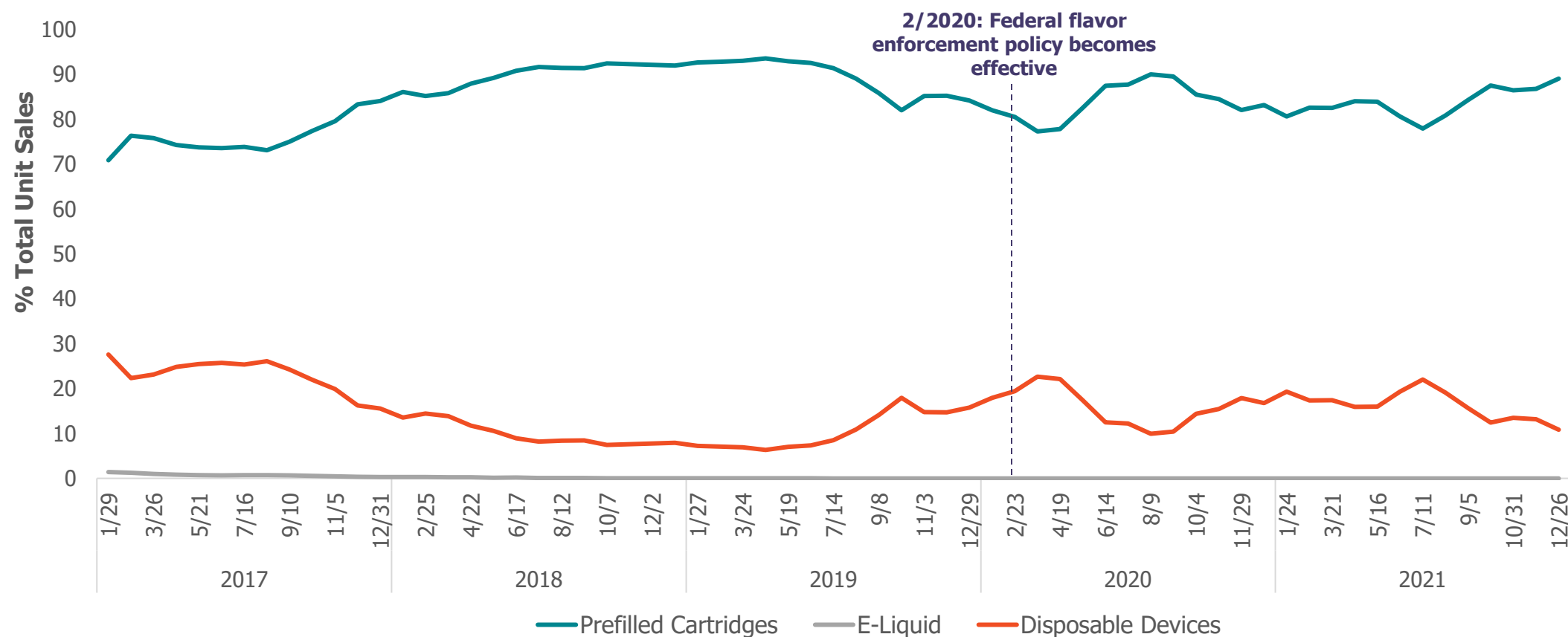
**Figure 25. New York E-Cigarette Unit Sales by Flavor, 4 Week Estimates 1/2017 – 12/2021\***

\*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 (5/17/20-12/26/21)

- Following New York's flavored e-cigarette restriction, monthly e-cigarette total unit sales decreased by 40.4% between May 17, 2020 and December 26, 2021 (from 1594.0 thousand to 949.2 thousand).
- From May 17, 2020 to December 26, 2021:
  - Menthol-flavored e-cigarette sales decreased by 97.5% (from 770.3 thousand to 19.0 thousand); market share decreased from 48.3% to 2.0%.
  - Tobacco-flavored e-cigarette sales increased by 49.8% (from 592.1 thousand to 887.2 thousand); market share increased from 37.1% to 93.5%.
  - Mint-flavored e-cigarette sales decreased by 81.1% (from 52.5 thousand to 9.9 thousand); market share decreased from 3.3% to 1.0%.
  - All other-flavored e-cigarette sales decreased by 81.5% (from 179.1 thousand to 33.1 thousand); market share decreased from 11.2% to 3.5%.

**Figure 26. New York E-Cigarette Unit Sales by Product Type, 4 Week Estimates 1/2017 – 12/2021\***

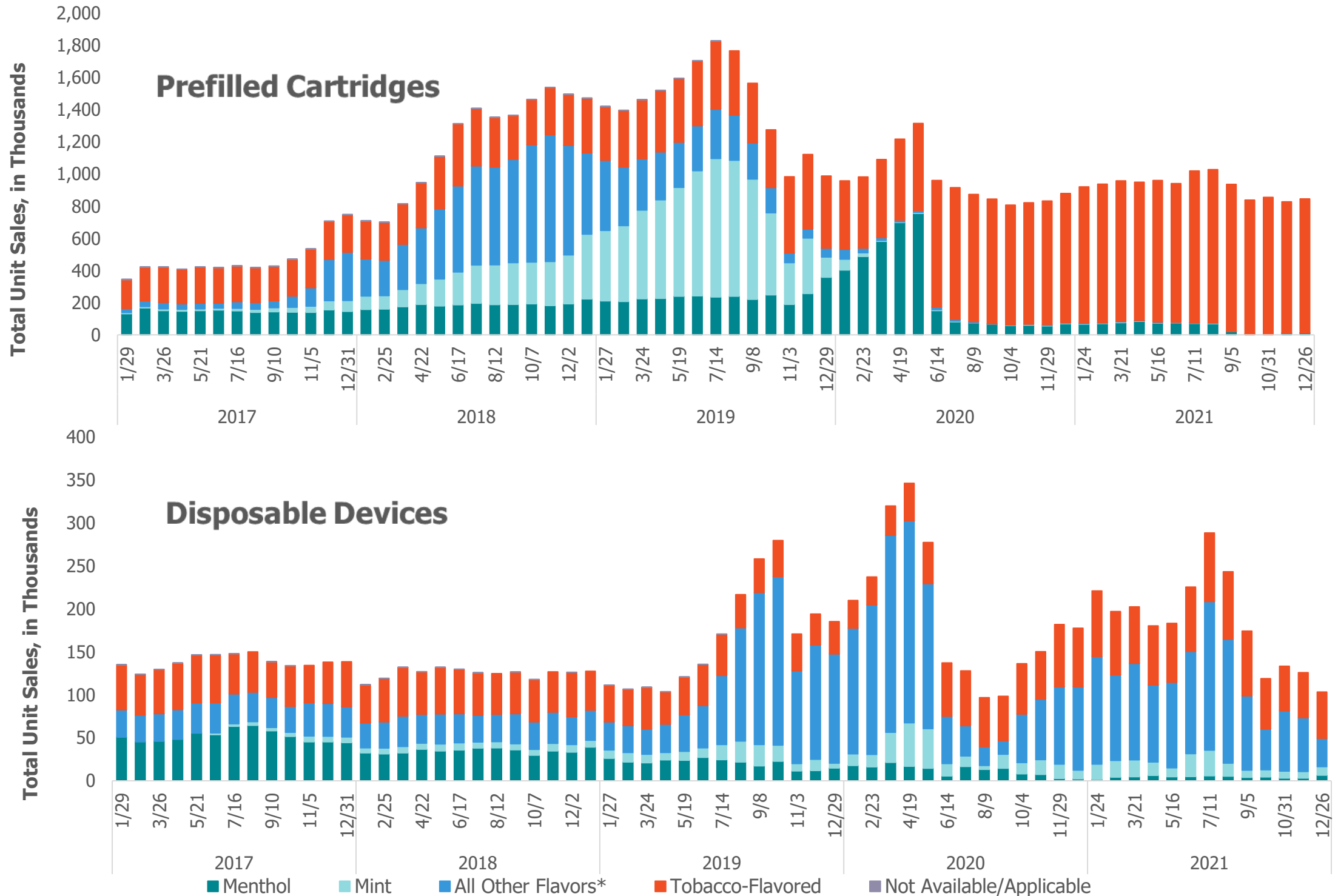


\*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; prefilled cartridges include tanks, cartridges, and pods used in rechargeable and reusable e-cigarette device; disposable devices include nonrechargeable and nonreusable e-cigarette devices 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.

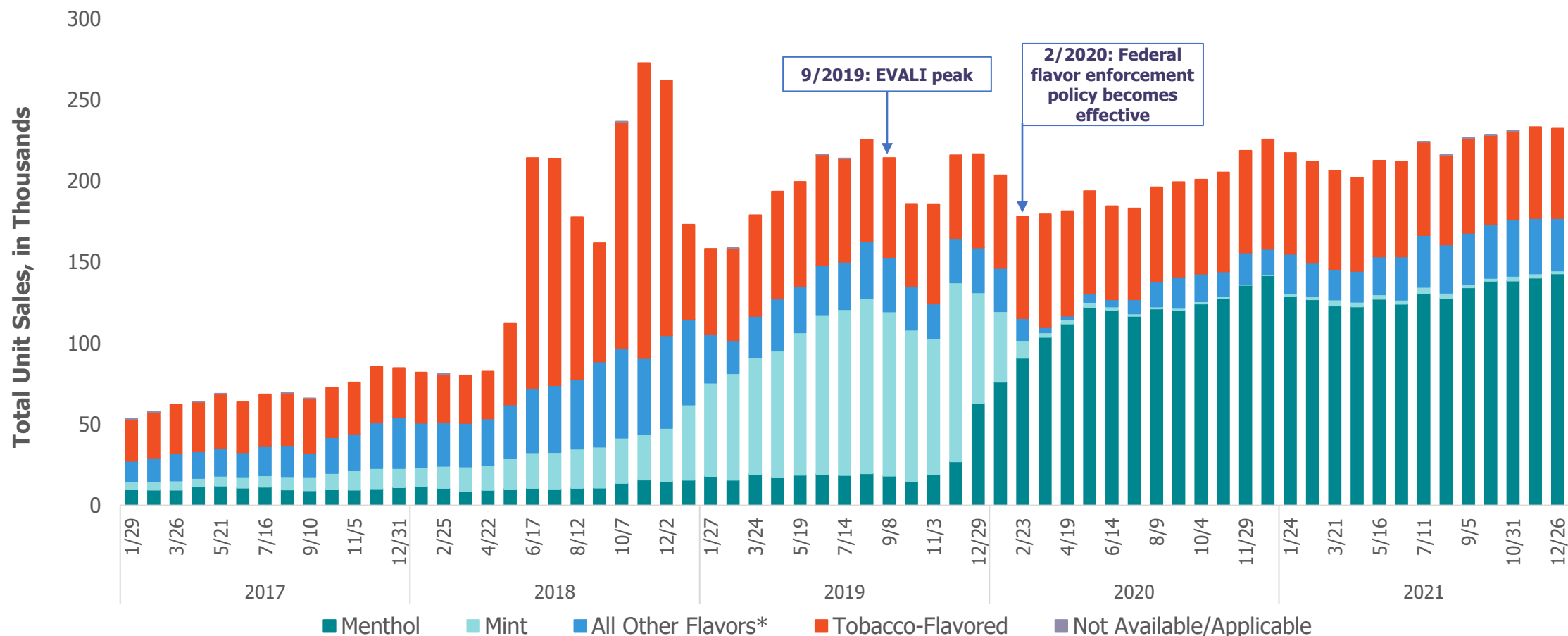
### Trends of Unit Sales by Product Following FDA’s Flavor Enforcement Policy

- 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 December 26, 2021:
  - Sales of disposable devices decreased by 56.5% (from 237.4 thousand to 103.3 thousand); market share decreased from 19.5% to 10.9%.
  - Sales of prefilled cartridges decreased by 13.9% (from 982.3 thousand to 845.9 thousand); market share increased from 80.5% to 89.1%.

**Figure 27. New York E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates 1/2017 – 12/2021**



**Figure 28. Oregon E-Cigarette Unit Sales by Flavor, 4 Week Estimates 1/2017 – 12/2021\***

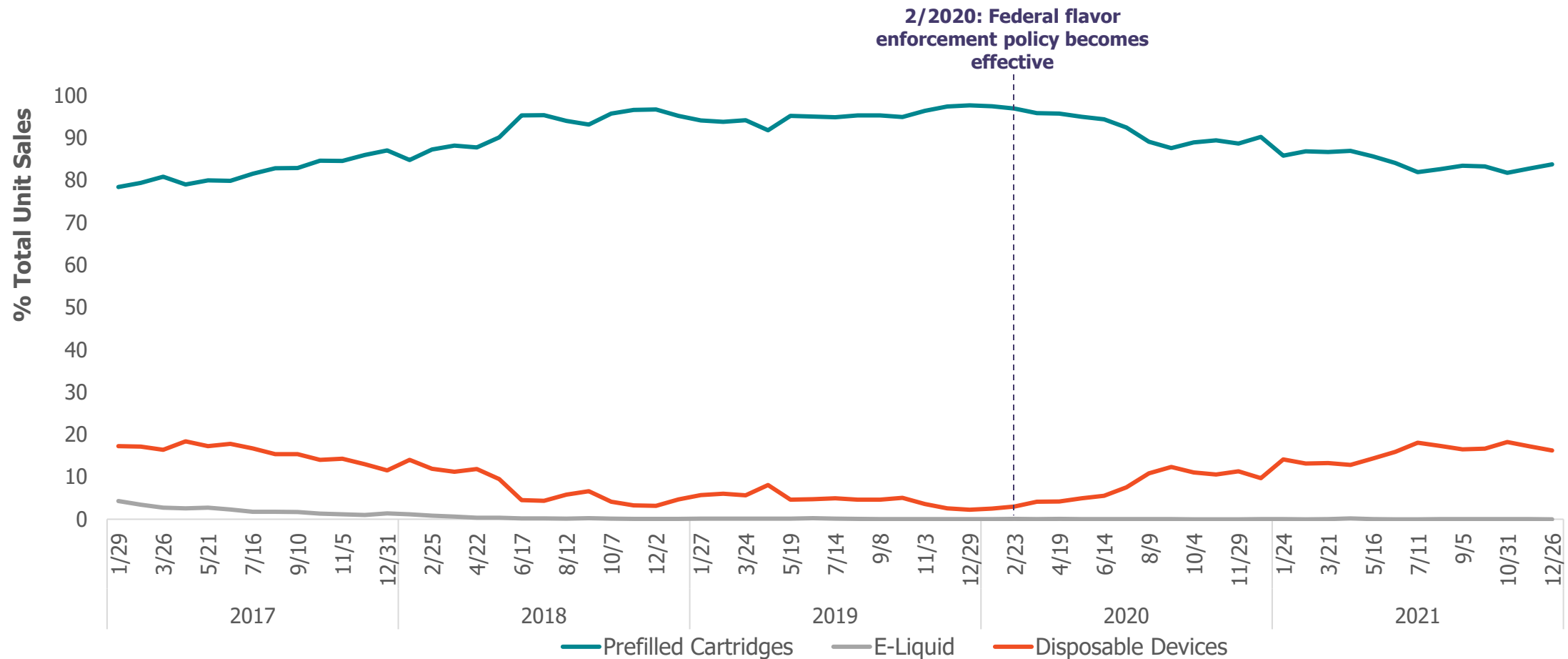


\*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; All Other Flavors category includes fruit, clove/spice, chocolate, alcoholic drink (such as wine, cognac, or other cocktails), candy/desserts/other sweets, some other flavor; e-cigarette accessories 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 December 26, 2021, monthly e-cigarette unit sales increased by 30.4% to 232.4 thousand units.
- From February 23, 2020 to December 26, 2021:
  - Menthol-flavored e-cigarette sales increased by 57.3% (from 90.9 thousand to 143.0 thousand); market share increased from 51.0% to 61.5%.
  - Tobacco-flavored e-cigarette sales decreased by 12.3% (from 63.0 thousand to 55.3 thousand); market share decreased from 35.3% to 23.8%.
  - Mint-flavored e-cigarette sales decreased by 83.6% (from 10.9 thousand to 1.8 thousand); market share decreased from 6.1% to 0.8%.
  - All other-flavored e-cigarette sales increased by 140.9% (from 13.4 thousand to 32.3 thousand); market share increased from 7.5% to 13.9%.

**Figure 29. Oregon E-Cigarette Unit Sales by Product Type, 4 Week Estimates 1/2017 – 12/2021\***

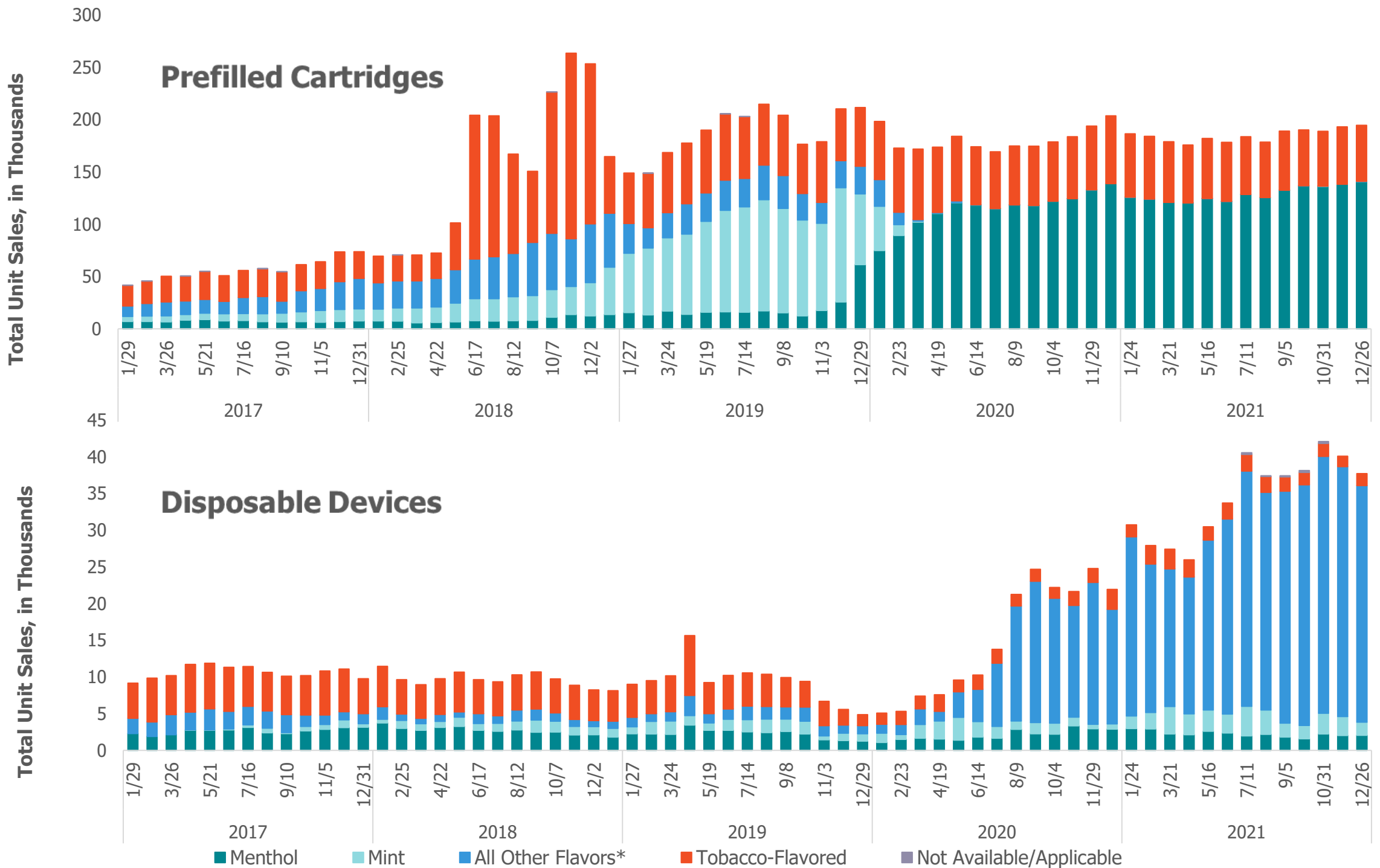


\*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; prefilled cartridges include tanks, cartridges, and pods used in rechargeable and reusable e-cigarette device; disposable devices include nonrechargeable and nonreusable e-cigarette devices 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

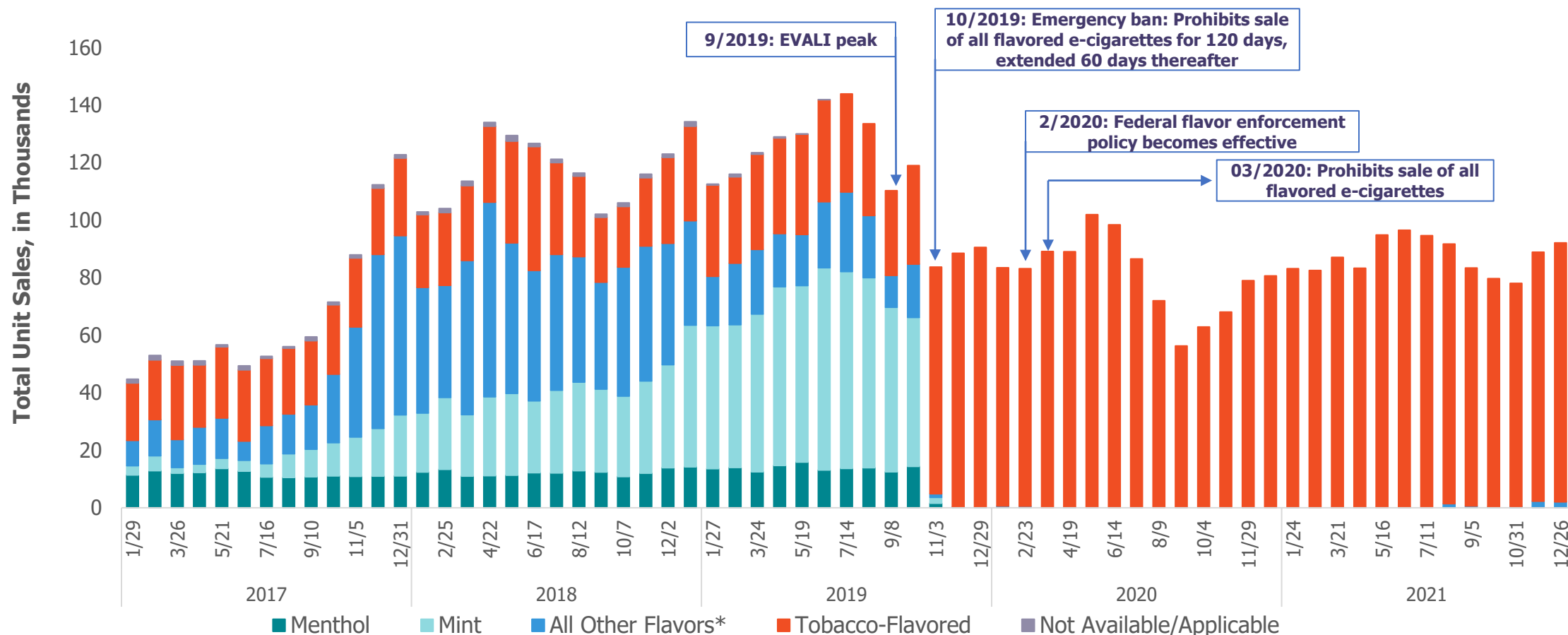
- Following FDA’s flavor enforcement policy, which prohibited the sale of flavored prefilled cartridges but exempted disposable devices and menthol and tobacco prefilled cartridges, between February 23, 2020 and December 26, 2021:
  - Sales of disposable devices increased by 606.3% (from 5.3 thousand to 37.7 thousand); market share increased from 3.0% to 16.2%.
  - Sales of prefilled cartridges increased by 12.6% (from 172.8 thousand to 194.7 thousand); market share decreased from 96.9% to 83.8%.

**Figure 30. Oregon E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates 1/2017 – 12/2021**





**Figure 31. Rhode Island E-Cigarette Unit Sales by Flavor, 4 Week Estimates 1/2017 – 12/2021\***

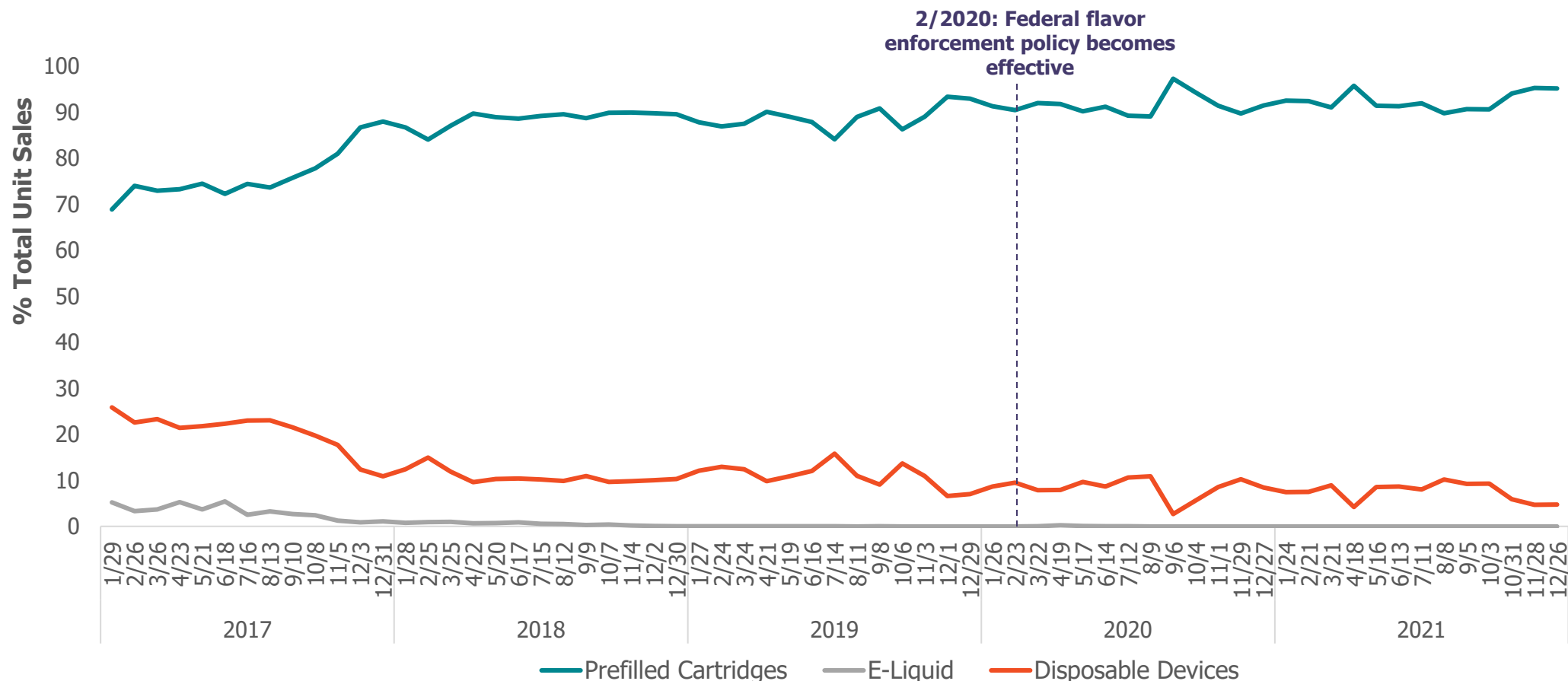


\*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; All Other Flavors category includes fruit, clove/spice, chocolate, alcoholic drink (such as wine, cognac, or other cocktails), candy/desserts/other sweets, some other flavor; e-cigarette accessories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

**Trends of Unit Sales by Flavor (10/6/19-12/26/21)**

- Following Rhode Island's flavored e-cigarette restriction, monthly e-cigarette total unit sales decreased by 22.6% from October 6, 2019 to December 26, 2021 (from 119.0 thousand to 92.1 thousand).
- From October 06, 2019 to December 26, 2021:
  - Menthol-flavored e-cigarette sales decreased by 100.0% (from 14.3 thousand to 0.0 thousand); market share decreased from 12.0% to 0.0%.
  - Tobacco-flavored e-cigarette sales increased by 162.6% (from 34.3 thousand to 90.1 thousand); market share increased from 28.8% to 97.8%.
  - 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%.
  - All other-flavored e-cigarette sales decreased by 89.2% (from 18.6 thousand to 2.0 thousand); market share decreased from 15.6% to 2.2%.

**Figure 32. Rhode Island E-Cigarette Unit Sales by Product Type, 4 Week Estimates 1/2017 – 12/2021\***

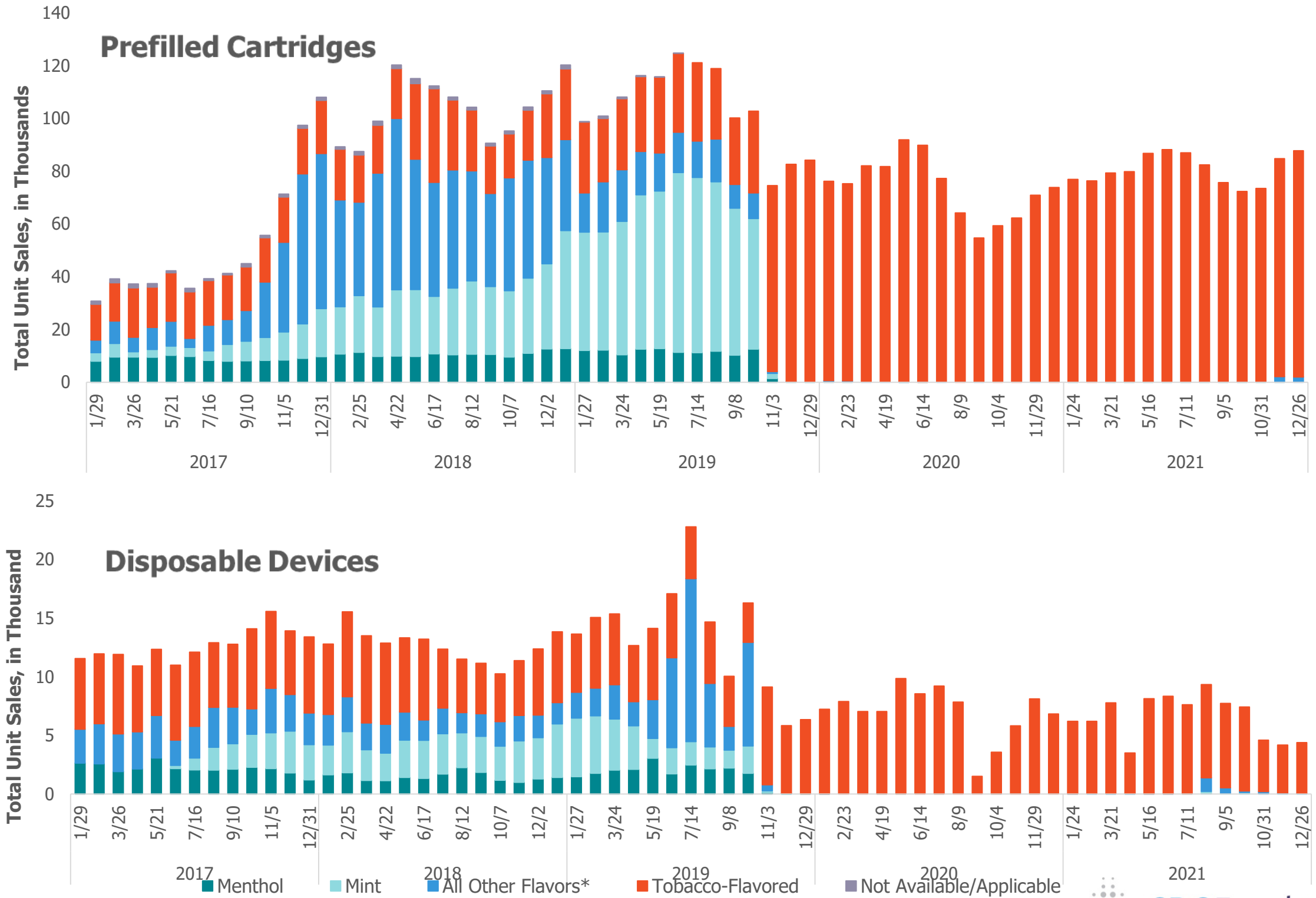


\*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; prefilled cartridges include tanks, cartridges, and pods used in rechargeable and reusable e-cigarette device; disposable devices include nonrechargeable and nonreusable e-cigarette devices 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.

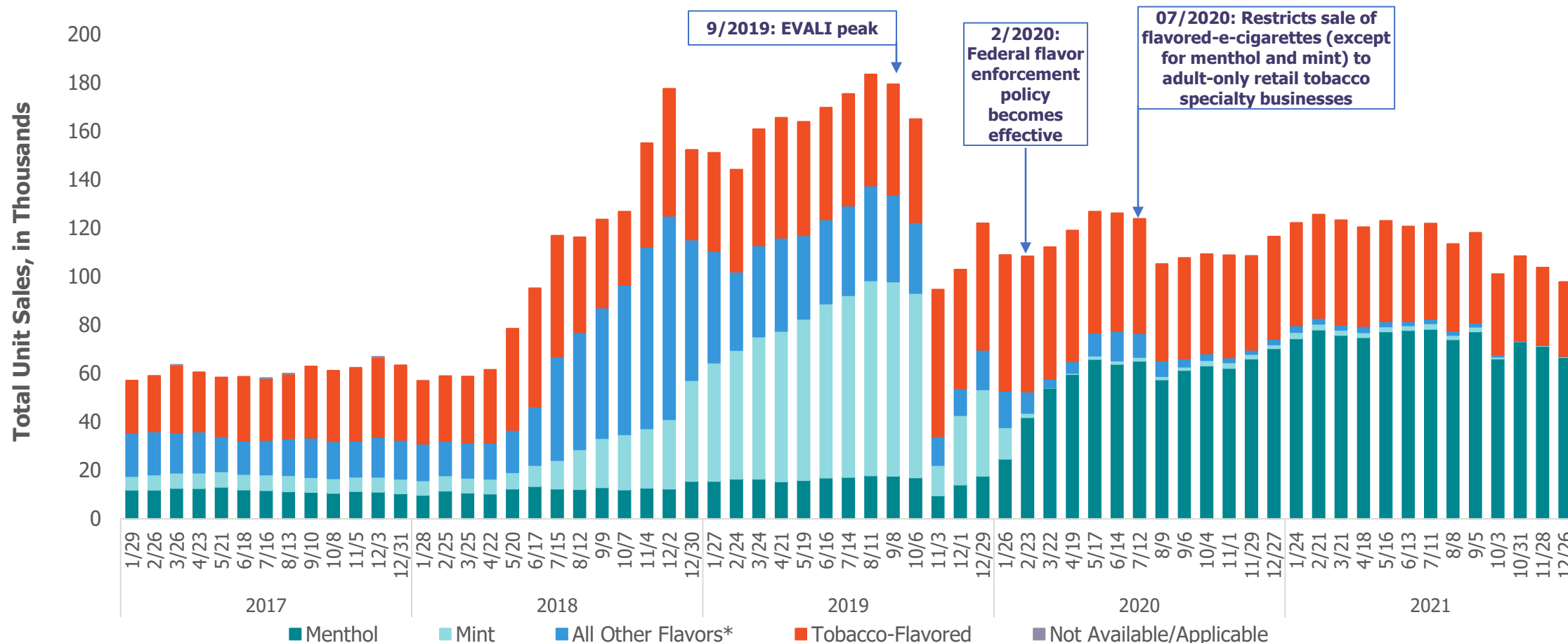
**Trends of Unit Sales by Product Following FDA’s Flavor Enforcement Policy**

- 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 December 26, 2021:
  - Sales of disposable devices decreased by 44.3% (from 7.9 thousand to 4.4 thousand); market share decreased from 9.5% to 4.8%.
  - Sales of prefilled cartridges increased by 16.7% (from 75.2 thousand to 87.7 thousand); market share increased from 90.5% to 95.2%.

**Figure 33. Rhode Island E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates  
1/2017 – 12/2021**



**Figure 34. Utah E-Cigarette Unit Sales by Flavor, 4 Week Estimates 1/2017 – 12/2021\***

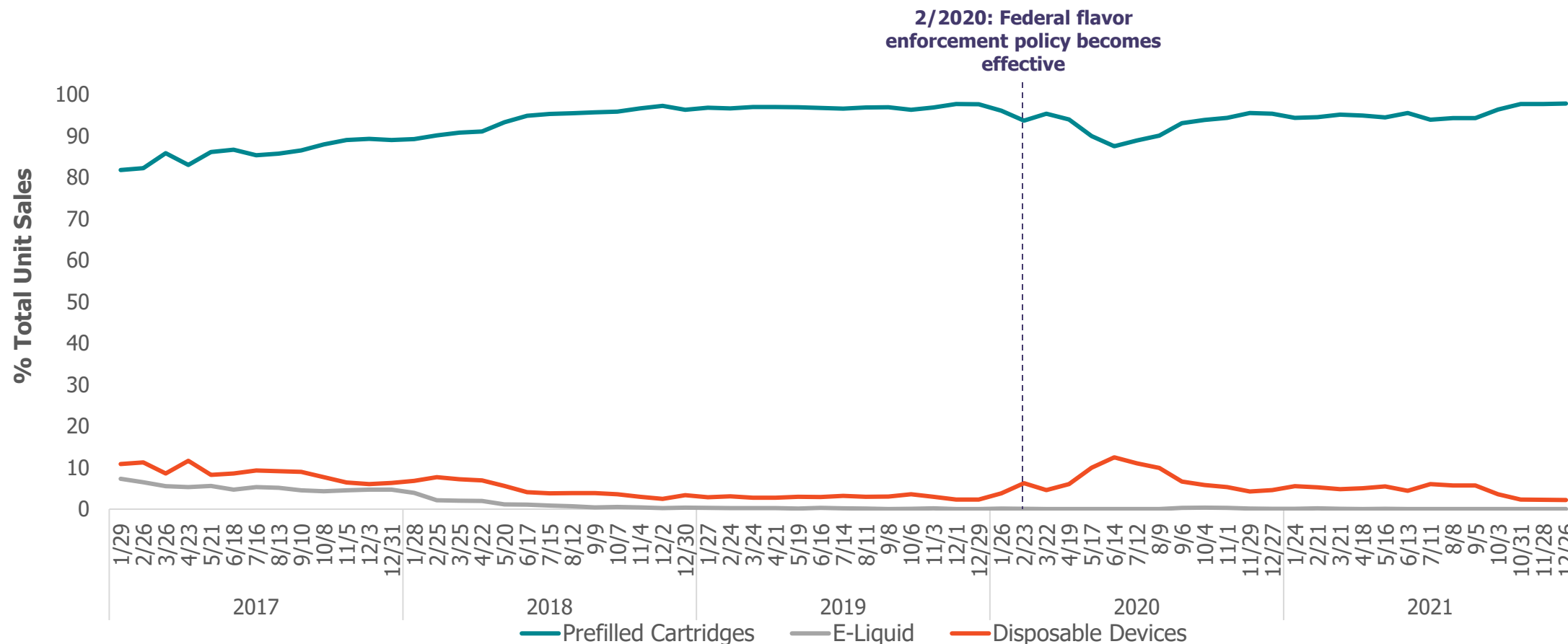


\*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; All Other Flavors category includes fruit, clove/spice, chocolate, alcoholic drink (such as wine, cognac, or other cocktails), candy/desserts/other sweets, some other flavor; e-cigarette accessories 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 December 26, 2021, monthly e-cigarette unit sales decreased by 9.7% to 97.9 thousand units.
- From February 23, 2020 to December 26, 2021:
  - Menthol-flavored e-cigarette sales increased by 59.1% (from 41.9 thousand to 66.7 thousand); market share increased from 38.6% to 68.1%.
  - Tobacco-flavored e-cigarette sales decreased by 45.0% (from 55.9 thousand to 30.8 thousand); market share decreased from 51.6% to 31.4%.
  - Mint-flavored e-cigarette sales decreased by 82.1% (from 1.8 thousand to 0.3 thousand); market share decreased from 1.7% to 0.3%.
  - All other-flavored e-cigarette sales decreased by 98.0% (from 8.8 thousand to 0.2 thousand); market share decreased from 8.2% to 0.2%.

**Figure 35. Utah E-Cigarette Unit Sales by Product Type, 4 Week Estimates 1/2017 – 12/2021\***

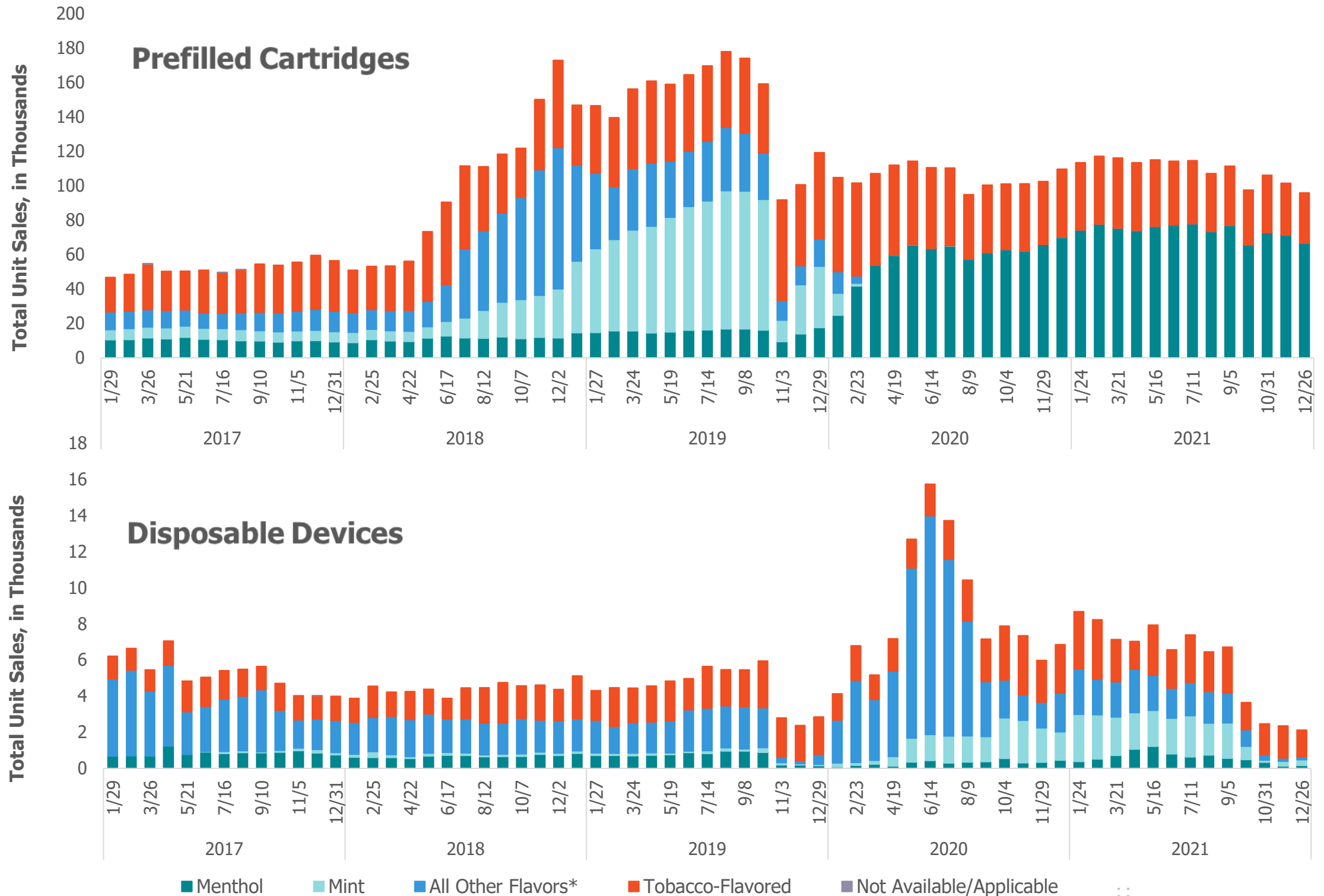


\*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; prefilled cartridges include tanks, cartridges, and pods used in rechargeable and reusable e-cigarette device; disposable devices include nonrechargeable and nonreusable e-cigarette devices 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.

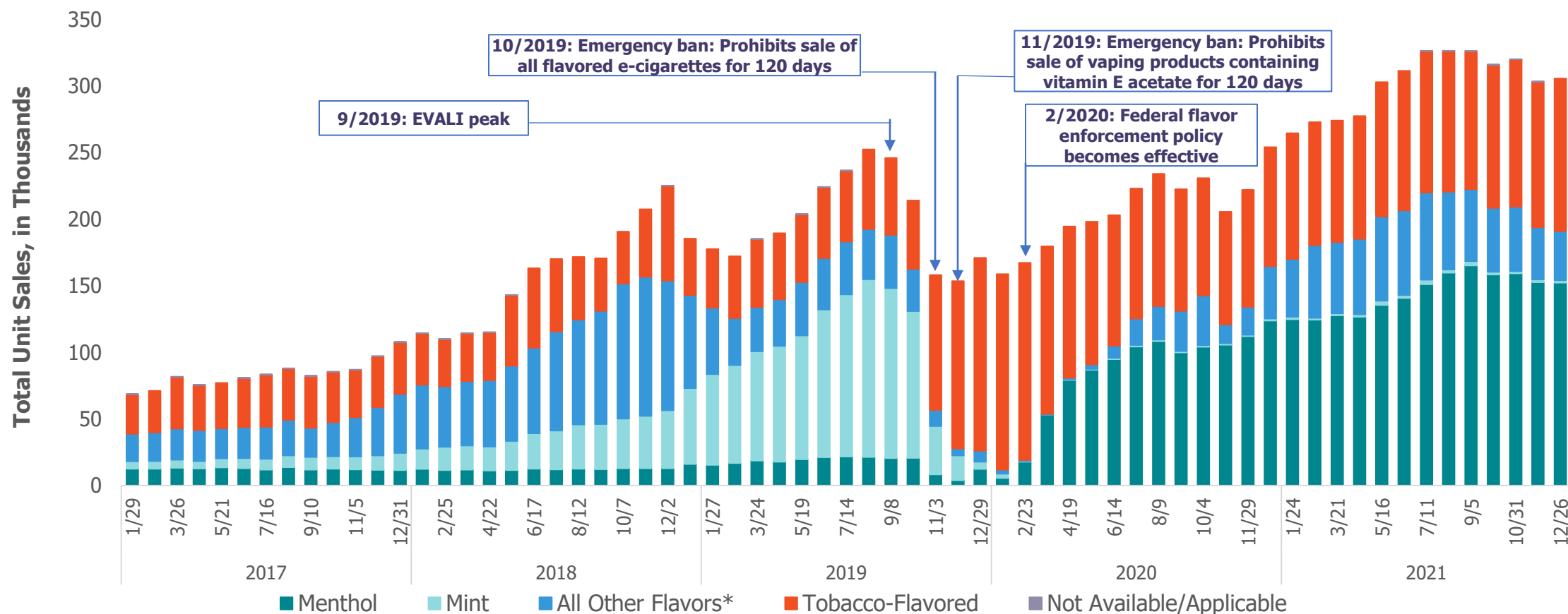
**Trends of Unit Sales by Product Following FDA’s Flavor Enforcement Policy**

- 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 December 26, 2021:
  - Sales of disposable devices decreased by 68.7% (from 6.8 thousand to 2.1 thousand); market share decreased from 6.3% to 2.2%.
  - Sales of prefilled cartridges decreased by 5.7% (from 101.6 thousand to 95.8 thousand); market share increased from 93.7% to 97.8%.

**Figure 36. Utah E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates 1/2017 – 12/2021**



**Figure 37. Washington E-Cigarette Unit Sales by Flavor, 4 Week Estimates 1/2017 – 12/2021\***



\*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).

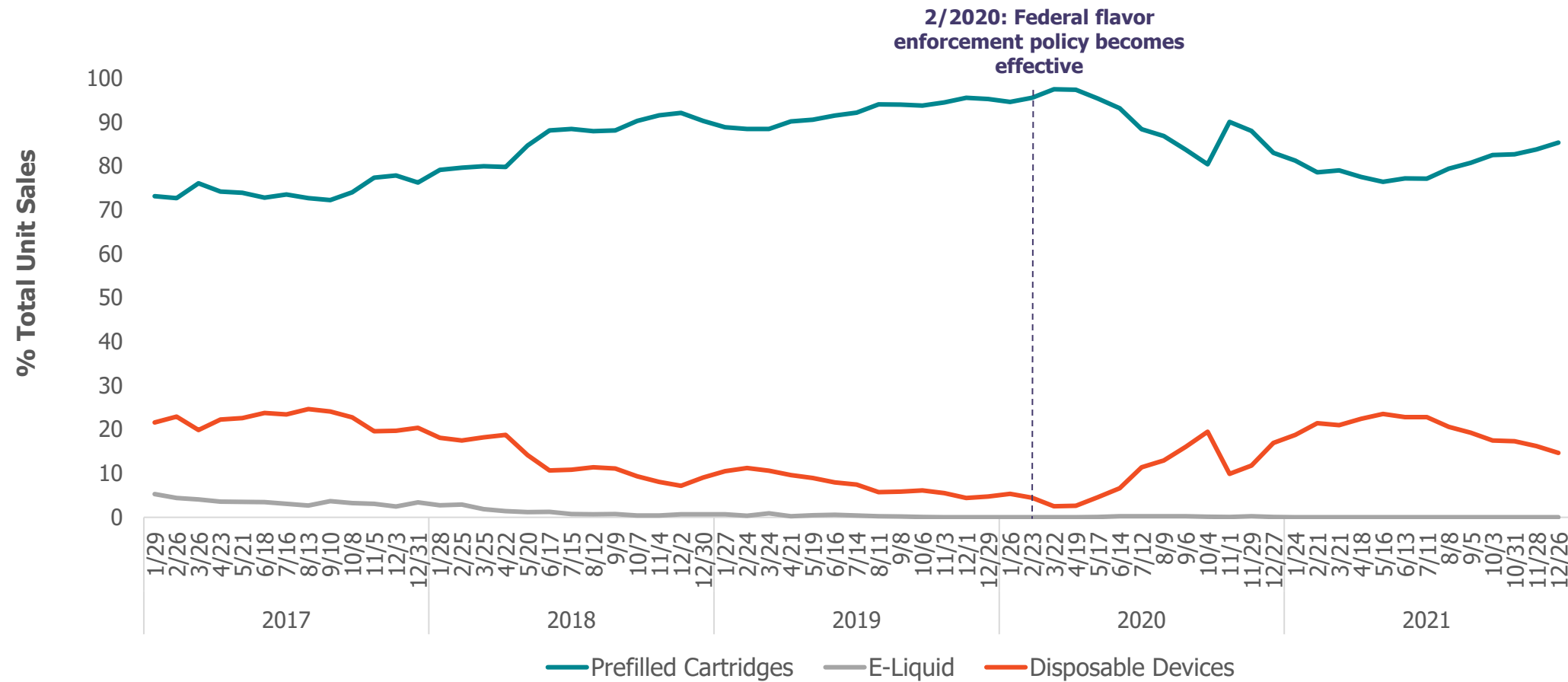
**Trends of Unit Sales by Flavor (10/6/19 - 1/26/20)**

- 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 (2020 – 2021)**

- Monthly e-cigarette total unit sales increased by 82.7% from 2020 to 2021 (from 167.2 thousand to 305.5 thousand).
- From February 23, 2020 to December 26, 2021:
  - Menthol-flavored e-cigarette sales increased by 747.8% (from 18.0 thousand to 152.2 thousand); market share increased from 10.7% to 49.8%.
  - Tobacco-flavored e-cigarette sales decreased by 22.6% (from 148.0 thousand to 114.5 thousand); market share decreased from 88.5% to 37.5%.
  - Mint-flavored e-cigarette sales increased by 305.6% (from 0.5 thousand to 2.0 thousand); market share increased from 0.3% to 0.7%.
  - All other-flavored e-cigarette sales increased by 5125.4% (from 0.7 thousand to 36.7 thousand); market share increased from 0.4% to 12.0%.

**Figure 38. Washington E-Cigarette Unit Sales by Product Type, 4 Week Estimates 1/2017 – 12/2021\***



\*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 December 26, 2021:
  - Sales of disposable devices increased by 505.8% (from 7.4 thousand to 44.8 thousand); market share increased from 4.4% to 14.7%.
  - Sales of prefilled cartridges increased by 63.2% (from 159.8 thousand to 260.7 thousand); market share decreased from 95.6% to 85.3%.



**Figure 39. Washington E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates 1/2017 – 12/2021**

