Testimony before the Maine Committee on Health and Human Services
Regarding Banning the Sale of Flavored Tobacco and Vapor Products
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Chairman Baldacci and Chairwomen Meyer and Members of the Committee,

Thank you for your time today to discuss banning flavors in tobacco and vapor products. My name is Lindsey Stroud and I'm Director of the Consumer Center at the Taxpayers Protection Alliance (TPA). TPA is a non-profit, non-partisan organization dedicated to educating the public through the research, analysis and dissemination of information on the government's effects on the economy. TPA's Consumer Center focuses on providing up-to-date information on adult access to goods including alcohol, tobacco and vapor products, as well as regulatory policies that affect adult access to other consumer products, including harm reduction, technology, innovation, antitrust and privacy.

While addressing youth use of age-restricted products is laudable, lawmakers must refrain from prohibitionist bans on products that may help adults quit smoking. Youth use of traditional tobacco products has reached record lows, while youth vaping has halved in recent years. Further, there is no evidence to support that banning flavors in tobacco and vapor products has led to further increases in youth use of such products, nor has it led to a significant decrease in youth and/or adult smoking rates. Rather than imposing draconian bans that also do not take into consideration the reasons why youth use such products, policymakers should utilize existing tobacco monies to fund programs that will prevent youth use while adults quit smoking.

- In 2021, only 5.5 percent of Maine high school students and 1.4 percent of middle school students reported current use of combustible cigarettes, which are some of lowest levels recorded.
- Between 2019 and 2021, current use of vapor products decreased by 39.4 percent among high schoolers in the Pine Tree State and by 37.1 percent among middle schoolers.
- Youth vaping has decreased by 53 percent between 2019 and 2022, while youth use of traditional tobacco products is at record lows.
- Youths are not using e-cigarettes because of flavors. In 2021 (among middle and high school students that were currently using e-cigarettes), 43.4 percent had used them because of feelings of anxiety, stress and/or depression, compared to 13.2 percent who had cited using them because of flavors.
- In 2021, 5.8 percent of Maine adults reported past-month e-cigarette use, which was a 41.5 percent increase from 2017.

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- The introduction of e-cigarettes has not led to increases in cigarette smoking, but rather, correlates with significant declines in smoking rates among young adults.
- Between 2007 and 2018, smoking rates among Maine adults aged 18 to 24 years old declined by 49.8 percent. Since 2018, young adult smoking rates have decreased another 56.3 percent, with average annual declines of 21.3 percent.
- Maine's vaping industry created $19.4 million in economic activity in 2021 while generating 241 direct vaping-related jobs and contributed more than $4 million in state taxes.
- Flavored vapor bans correlated with increases in young adult smoking rates.
- According to data from the CDC, smoking rates among young adults aged 18 to 24 years old decreased on average by 19.7 percent between 2020 and 2021. Yet, in three of the then-four states with active flavor bans, smoking rates increased.
- Existing flavor bans have failed to significantly reduce vaping rates among youth. Between 2019 and 2021, current vapor product use among Massachusetts high school students decreased by 45 percent and in Rhode Island the percent of high schoolers currently using e-cigarettes decreased by 40.9 percent during the same period.
- Comparatively, in New Hampshire, high school vapor product use declined by 52 percent during the same period, in Hawaii by 51.6 percent and in Connecticut high school vapor product rates decreased by 60.7 percent between 2019 and 2021.
- Massachusetts' menthol cigarette ban did not lead to significant reductions in adult rates. Between 2019 and 2021, adult smoking rates decreased by 12.4 percent in Massachusetts, while they decreased by 22.6 percent in New Hampshire.
- New Hampshire also experienced a 28 percent increase in state cigarette excise tax revenue between 2019 and 2021 compared to Massachusetts which saw tax collections decrease by 20.5 percent.
- Bans will only lead to loss revenue and illicit markets, as indicated in other states, and could cause consumers to be exposed to harmful substances.
- Online marketplaces are already offering consumers banned flavored tobacco and vapor products. As these are unregulated, they can pose severe risks to consumers.
- In New York City, one seller has an ad on Craigslist which offers flavored e-liquid. The seller also remarks that "[p]ersonal questions of [his] cost, date purchased, where purchased, why selling is no one's concern." In California, which recently banned the sale of flavored tobacco and vapor products, the "menthol man" is offering to deliver menthol cigarettes for $15-a-pack in Sacramento.
- Maine woefully underfunds programs to prevent youth use of tobacco and/or vapor products and help adults quit smoking, while simultaneously receiving millions of dollars from the pockets of the adults who smoke. In 2021, for every $1 the state received in tobacco monies, it spent only $0.08 on tobacco control efforts.

Youth Tobacco and Vapor Product Use

Despite headlines, youth use of traditional tobacco products is at record lows, while youth e-cigarette use peaked in 2019 and has steadily declined in the years since.

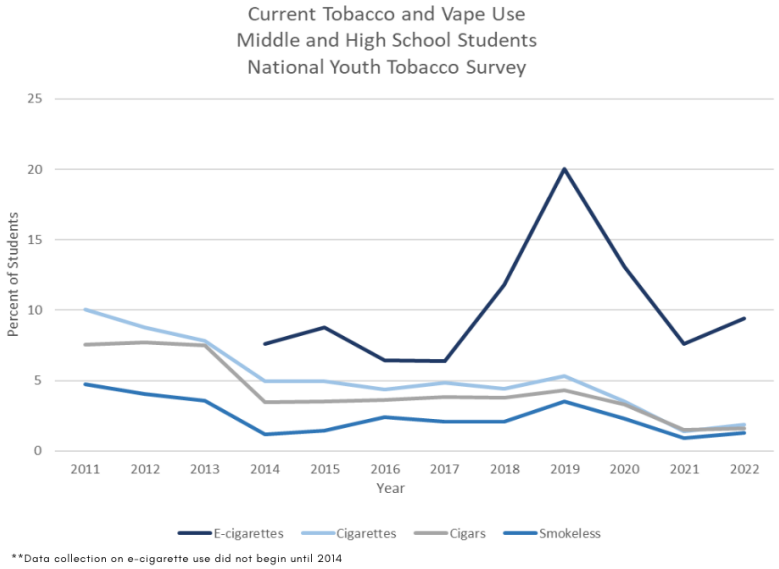
In 2021, according to the Maine Integrated Healthy Youth Survey, only 17.6 percent of high schoolers and 9.3 percent of middle schoolers reported trying combustible cigarettes, including just one puff.[1] Since 2009, ever cigarette use among middle schoolers has declined by 50 percent and among high schoolers by 56.9 percent. Current use, defined as having smoked a cigarette on at least one occasion in the 30 days prior to the survey has also declined. Among high school students, only 5.5 percent reported current cigarette smoking, a 68.8 percent decline from 2009's 17.6 percent. Among middle school students, current smoking has decreased by 73.6 percent, from 5.3 percent in 2021 to 1.4 percent in 2021.

Youth use of vapor products has also declined. In 2021, 31.7 percent of high school students had ever tried an e-cigarette and only 17.4 percent were currently vaping. Among middle school students, only 10.2 percent reported ever trying e-cigarettes and only 4.4 percent were current e-cigarette users.

Similar to other states and national data, youth vaping seems to have peaked in Maine in 2019. That year, 45.1 percent of high schoolers had tried e-cigarettes, and 28.7 percent were currently vaping. Between 2019 and 2021, ever-use of e-cigarettes declined by 29.7 percent and current use by 39.4 percent. Among middle school students in 2019, 16.3 percent reported trying vapor products and 7 percent were currently vaping. Ever- and current use of vapor products declined by 37.4 percent and 37.1 percent, respectively.

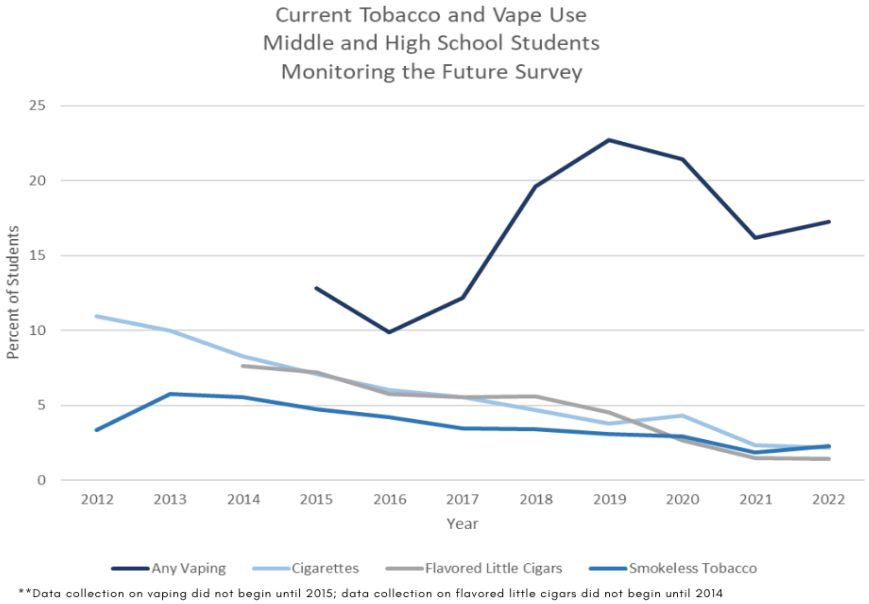
According to the National Youth Tobacco Survey, youth vaping peaked in 2019 when one in five (20 percent) of youths were currently using e-cigarette products, defined as having had used the product on at least one occasion in the 30 days prior.[2] In 2022, less than one in ten (9.4 percent) of youth reported current e-cigarette use, which is a 53 percent decline from 2019's levels.

In 2022, regarding traditional tobacco product use, 1.9 percent reported current use of cigarettes, 1.6 percent had smoked a combustible cigarette and 1.3 percent were currently using smokeless tobacco. Given the record lows in traditional tobacco product use, banning flavors are not necessary as youth are not overwhelmingly using these products.



Other national survey data has found significant declines in youth use of tobacco and vapor products. In 2022, according to the Monitoring the Future Survey (MTFS), among middle and high school students, 2.3 percent reported currently using smokeless tobacco, 2.2 percent reported current combustible cigarette use, and 1.4 percent reported using flavored little cigars.[3] Again, these are some of the lowest levels recorded. In 2012, more than one in ten U.S. youth (11 percent) reported current cigarette use. In ten years, smoking rates among U.S. youth declined by 78.7 percent. During the same period smokeless tobacco use among youth decreased by 59.6 percent. Between 2014 and 2022, the percent of youth reporting current use of flavored cigars declined by 81.2 percent.

Similar to the NYTS, the MTFS also found that youth vaping peaked in 2019, when 22.7 percent of U.S. youth reported “any vaping” – i.e., using a vapor product to vape either nicotine or other substances. Between 2019 and 2022, the percent of youths reporting any vaping decreased by 23.9 percent.



Given the significant reductions in youth use of vapor products, as well as historic low use of traditional tobacco products, lawmakers must refrain from prohibitionist policies that fail to consider these reductions.

Youths Are Self-Medicating, Not Using Vapes Because of Flavors

While lawmakers tout the number of youth that are using e-cigarettes, they fail to listen to the data on why youth using these products.

According to the 2021 NYTS, among middle and high school students that reported current e-cigarette use, 43.4 percent cited using them because they were "feeling anxious, stressed, or depressed," compared to only 13.2 percent who cited using them because they were available in flavors.

Among students that reported having ever tried an e-cigarette, 57.8 percent cited using them because a friend uses them, compared to 13.5 percent who cited the availability of flavors.

Reasons for first e-cigarette use National Youth Tobacco Survey, United States, 2021		
	Among ever e-cigarette users	**Among current e-cigarette users**
A friend [used/uses] them	57.8	28.3
I [was/am] curious about them	47.6	10.3
I [was/am] feeling anxious, stressed, or depressed	25.1	43.4
To get a high or buzz from nicotine	23.3	42.8
A friend family member [used/uses] them	18.6	8.7
I [could/can] use them to do tricks	16.5	20
They [were/are] available in flavors, such as menthol, mint, candy, fruit, or chocolate	13.5	13.2
I [could/can] use them unnoticed at home or at school	10.8	13
They are less harmful than other forms of tobacco such as cigarettes	8.3	10.3
They [were/are] easier to get than other tobacco products, such as cigarettes	4.8	6
I've seen people on TV, online, or in movies use them	4.5	2.9
To try to quit using other tobacco product, such as cigarettes	2.5	4.6
They cost less than other tobacco products, such as cigarettes	2.2	4.7
Some other reason	10.6	19.5

This is similar to data from state surveys.

In 2019, among all Connecticut high school students, 5.2 percent reported using e-cigarettes because of "flavors," 18.2 percent cited "other," and 12.9 percent reported using e-cigarettes because of friends and/or family.[4]

In 2017, among Hawaiian high school students that had ever used e-cigarettes, 26.4 percent cited flavors as a reason for e-cigarette use, compared to 38.9 percent that reported "other."[5]

Among highschoolers in Maryland that used e-cigarettes, when asked about the "main reason" for using e-cigarettes only 3.2 percent responded "flavors."[6] Conversely, 13 percent reported because "friend/family used them," 11.7 percent reported "other," and 3.8 percent reported using e-cigarettes because they were less harmful than other tobacco products.

In 2019 (among all Montana high school students), only 7 percent reported using vapor products because of flavors, compared to 13.5 percent that reported using e-cigarettes because of "friend or family member used them."[7] Further, 25.9 percent of Montana high school students reported using vapor products for "some other reason."

In 2019, among all students, only 4.5 percent of Rhode Island high school students claimed to have used e-cigarettes because they were available in flavors, while 12.5 cited the influence of a friend and/or family member who used them and 15.9 percent reported using e-cigarettes "for some other reason."[8]

In 2017, among current e-cigarette users, only 17 percent of Vermont high school students reported flavors as a reason to use e-cigarettes. Comparatively, 35 percent cited friends and/or family members and 33 percent cited "other."[9]

In 2019, among high school students that were current e-cigarette users, only 10 percent of Vermont youth that used e-cigarettes cited flavors as a primary reason for using e-cigarettes, while 17 percent of Vermont high school students reported using e-cigarettes because their family and/or friends used them.[10]

In 2019, among all Virginia high school students, only 3.9 percent reported using e-cigarettes because of flavors, 12.1 used for some other reason, and 9.6 used them because of friends and/or family members.[11]

If lawmakers want to address youth vaping, they must understand why youths are vaping.

Adult E-Cigarette Use

The CDC provides data on adult e-cigarette use for only 2016, 2017, and 2021.

In 2021 (among all Maine adults), 5.8 percent were currently using e-cigarettes. This is a 41.5 percent increase from 2017 when 4.4 percent of Maine adults were current e-cigarette users.

In 2021 (among all Maine adults), 20 percent of 18- to 24-year-olds, 9.3 percent of 25–44-year-olds, 2.8 percent of 55–64-year-olds, and one percent of adults aged 65 years or older were currently using e-cigarettes.

Among adults earning $25,000 or less, 7.9 percent reported current e-cigarette use, compared to 5.1 percent who reported earning $50,000 or more.

In Maine, 5.7 percent of White adults were currently vaping in 2021. There is no data for other races.

Young Adult Smoking Rates

As e-cigarettes have disrupted the traditional tobacco market, policymakers have shifted their attention towards youth use and subsequent smoking initiation. Despite the rhetoric, the introduction of e-cigarettes has not led to increases in young adult cigarette smoking, but rather, correlates with significant declines.

E-cigarettes first came to U.S. market in 2007 when 28.7 percent of Mainers aged 18 to 24 years old were currently smoking. In 2018, public health purported to a so-called "youth vaping epidemic" when 14.4 percent of young adults in the Pine Tree State were smoking. Between 2007 and 2018, young adult smoking rates declined by 49.8 percent. Further, since 2018, young adult smoking rates have decreased another 56.3 percent, with average annual declines of 21.3 percent.

Though data is limited to only three years, increases in vaping correlate with decreases in smoking.

In 2017 (among 18- to 24-year-olds), 15.1 percent and 9.7 percent were currently using combustible cigarettes and e-cigarettes, respectively. Between 2017 and 2021, current cigarette use among young adults decreased by 58.3 percent while vapor product use increased by 106 percent.

Given the epic lows in young adult smoking rates, lawmakers must refrain from policies that restrict access to alternatives to smoking.

Vapor Economics 101: Maine

Electronic cigarettes and vapor products are not only a harm reduction tool for hundreds of thousands of smokers in the Land of Enchantment, they're also an economic boon.

In 2021, according to the analysis by the Vapor Technology Association, the industry created 241 direct vaping-related jobs in Maine. These jobs generated more than $7.2 million in wages.[12] Moreover, the industry has created hundreds of secondary jobs in the Pine Tree State, bringing the total economic impact in 2021 to $19.4 million. In the same year, Maine received more than $4 million in state taxes attributable to the vaping industry.

Unfortunately, efforts by anti-vaping organizations and policymakers have negatively affected vape shops in the Pine Tree State. The number of employees has decreased by 23 percent from 313 in 2018 to 241 in 2021.[13] Further, state tax collections in 2021 were down 1.9 percent from 2018's level of $4.09 million. Overall, the economic output from the vaping industry in Maine increased by only 5.6 percent, from $51.4 million in 2018 to $54.3 million in 2021.

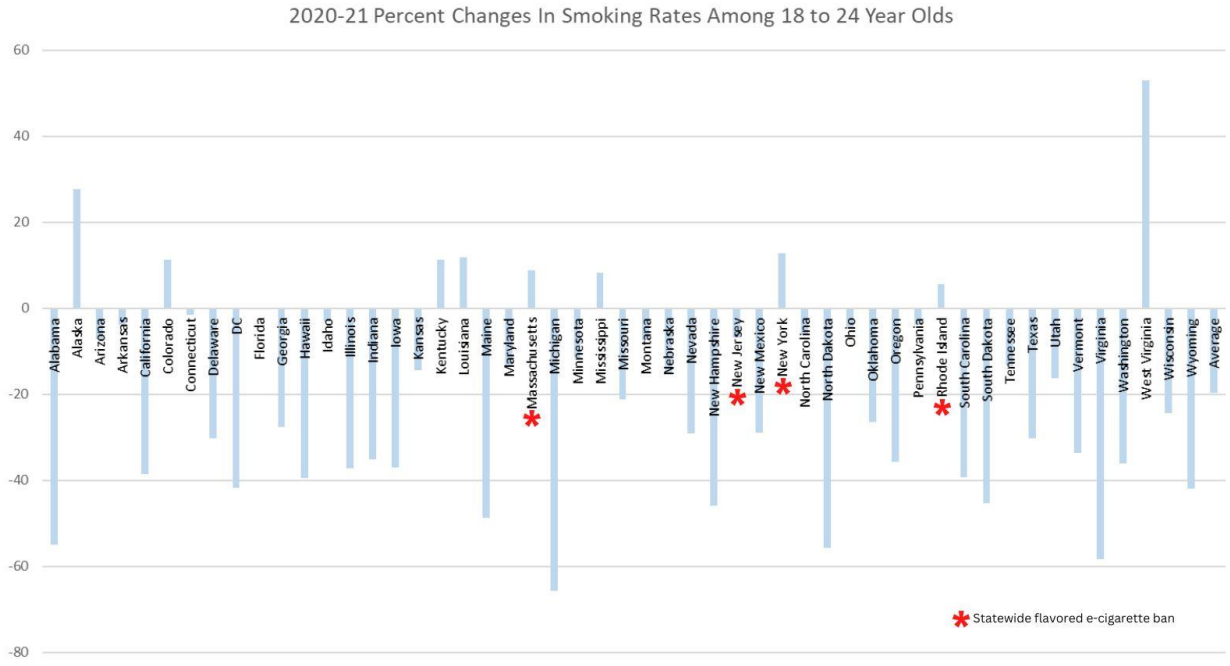
Existing Flavor Bans Lead To Increases in Young Adult Smoking

Currently, five states ban the sale of flavored vapor products, with two that have also banned the sale of flavored tobacco products, including cigars and combustible cigarettes.

According to data from the CDC, smoking rates among young adults aged 18 to 24 years old decreased on average by 19.7 percent between 2020 and 2021. Yet, in three of the then-four states with active flavor bans, smoking rates increased.

In Massachusetts, 7.4 percent of 18- to 24-year-olds were current smokers in 2021. This is an 8.8 percent increase from 2020 when only 6.8 percent of young adults in the Bay State were currently smoking. In New York, young adult smoking rates increased by 12.7 percent from 5.5 percent in 2020 to 6.2 percent in 2021. In Rhode Island, between 2020 and 2021, smoking rates among young adults aged 18 to 24 years old increased by 5.7 percent.

Of the four states with active flavored e-cigarette bans, only New Jersey saw a reduction (6.8 percent) in young adult smoking rates. This is significantly lower than the average rate of reduction among all U.S. young adults.



Existing Flavor Bans Failed to Significantly Reduce Both Tobacco and Vaping Use Among Youth and Adults

According to data from state surveys, there were greater declines in youth vaping rates among states that did not have flavor bans in place over the past two years.[14]

Massachusetts banned the sales of flavored tobacco and vapor products in 2020. Similar to national and other state data, youth vaping peaked in the Bay State in 2019 when 14.7 percent of middle schoolers and 51.1 percent of high schoolers reported ever trying a vapor product. Between 2019 and 2021, ever-use of e-cigarettes declined by 39.5 percent among Massachusetts high schoolers and by 31.3 percent among middle schoolers. Among high school students,

current vaping rates, defined as having used the product on at least one occasion in the 30 days prior, declined by a whopping 45 percent.

Proponents of prohibiting the sale of flavored vapor products have welcomed these declines, turning towards the two-year ban the state has had in place as the reason for reducing vaping rates among American youth. Yet, in states that have not imposed such prohibitions, vaping rates declined as well and, in some cases, far more significantly.

For example, in neighboring New Hampshire, current vaping rates among high schoolers decreased by 52 percent from 33.8 percent in 2019 to 16.2 percent in 2021. In Hawaii, where lawmakers are currently mulling over banning the sale of flavored tobacco and vapor products, current vaping rates among middle students decreased by 62.1 percent and by 51.6 percent among high school students. Connecticut has also debated banning the sale of flavored tobacco and vapor products. Between 2019 and 2021, the percentage of Connecticut high school students who were currently using e-cigarettes declined by 60.7 percent between 2019 and 2021.

Vaping rates have declined more significantly in states without flavored bans in place. For instance, among Rhode Island high school students, current use of e-cigarettes decreased by only 40.9 percent between 2019 and 2021. The Ocean State banned the retail sale of flavored e-cigarettes in October 2019.

But the experience in Massachusetts is even more interesting as it has not led to a significant reduction in smoking rates among adults.[15]

In 2021, according to data from the CDC's Behavioral Risk Factor Surveillance Systems survey, 10.6 percent of adults in Massachusetts were currently smoking, which was a 12.4 percent decrease from 2019 (the year prior to the flavor ban) when 12.1 percent of adults were then currently smoking. In New Hampshire, smoking rates among adults decreased by 22.6 percent during the same period, from 15.9 percent of adults that were currently smoking in 2019 to 12.3 percent in 2021.

Even more intriguing, while in neighboring New Hampshire smoking rates among adults in the state were significantly declining, revenue from state excise cigarette taxes was increasing.

In 2021, the Granite State collected $228.3 million in state cigarette excise tax revenue. This was a 20.5 percent increase from 2019's $189.4 million. Conversely, in Massachusetts, cigarette tax revenue decreased by 28 percent from $515.2 million in 2019 to $370.8 million in 2021.

Illicit Market Thriving

New York banned the sale of flavored vapor products in 2020 and it is not hard to search online marketplaces finding flavored vapor products available for sale. Such products are unregulated and pose hazards to consumers.

For example, one online ad offers a wide variety of flavored e-liquid from peach to cotton candy and menthol. The seller offers these at 26th Street and 9th Avenue in Manhattan. The seller also remarks that "[p]ersonal questions of [his] cost, date purchased, where purchased, why selling is no one's concern." In California, which recently banned the sale of flavored tobacco and vapor products, the "menthol man" is offering to deliver menthol cigarettes for $15-a-pack in Sacramento.

Should Maine move forward with a ban, one could expect more instances of such sales.

Tobacco Monies

Each year, states receive billions of dollars borne out of the lungs of persons who smoke. This revenue includes excise cigarette taxes and settlement payments. Yet, each year, states spend miniscule amounts of tobacco-related monies on programs to help adults quit smoking and prevent youth use.

In 2021, the Pine Tree State collected an estimated $112.8 million in state excise tax revenue from combustible cigarettes.[16] This was a 6.5 percent decrease from 2020's $120.6 million. Between 2000 and 2021, Maine collected more than $2.6 billion in cigarette taxes.

Since 2000 Maine has collected annual payments from tobacco manufacturers based on the percentage of cigarettes and tobacco products sold in the state in that year. Maine collected $48.6 million in settlement payments in 2021, a 5.2 percent increase from 2020's $46.2 million.[17] Since 2000 the Pine Tree State collected over $1.1 billion in tobacco settlement payments.

While Maine collected an estimated $161.4 million in tobacco-related monies in 2021, the state allocated only $13.9 million in state funding towards tobacco control programs, including cessation, education, and youth prevention efforts, which was a 17.8 percent increase in funding from 2020 levels.[18] This amounts to 12.3 percent of taxes and 28.6 percent of settlement payments. In 2021, for every $1 the state received in tobacco monies, it spent only $0.08 on tobacco control efforts.

Conclusion

Lawmakers must refrain from prohibitionist policies that will only drive adult consumers to an underground market, exposing users to possibly harmful, unregulated products. Given the significant reductions in youth use of e-cigarettes, as well as the record lows in use of traditional tobacco products, bans on the sales of flavored tobacco and vapor products are not necessary. Rather, policymakers should use more of the already-existing monies derived from cigarettes to prevent youth use and help adults quit.

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[1] Maine Department of Health and Human Services, "Maine Integrated Youth Health Survey," 2021, https://www.maine.gov/miyhs/. Accessed December 12, 2022.
[2] Eunice Park-Lee, *et* al., "Tobacco Product Use Among Middle and High School Students — United States, 2022," *Morbidity & Mortality Weekly Report*, Centers for Disease Control and Prevention, November 11, 2022, https://www.cdc.gov/mmwr/volumes/71/wr/mm7145a1.htm?s_cid=mm7145a1_w.
[3] University of Michigan, "1975-2022 Data for In-School Surveys of 8th, 10th, and 12th Grade Students," *Monitoring the Future*, 2022, https://monitoringthefuture.org/results/data-products/tables-and-figures/.
[4] Connecticut Department of Public Health, "Connecticut High School Survey Codebook," *2019 Youth Risk Behavior Survey Results*, 2019, https://portal.ct.gov/-/media/Departments-and-Agencies/DPH/CSHS/2019CT_Codebook.pdf.
[5] Lance Ching, Ph.D., et al., "Data Highlights from the 2017 Hawai'i Youth Tobacco Survey," Hawai'i State Department of Health, June 29, 2018, http://www.hawaiihealthmatters.org/content/sites/hawaii/YTS_2017_Report.pdf.
[6] Maryland Department of Public Health, "Maryland High School Survey Detail Tables – Weighted Data," *2018 Youth Risk Behavior Survey,* 2018, https://phpa.health.maryland.gov/ccdpc/Reports/Documents/2018%20YRBS%20YTS%20Reports/Maryland/2018MDH%20Detail%20Tables.pdf.
[7] Montana Office of Public Instruction, "2019 Montana Youth Risk Behavior Survey High School Results," 2019, http://opi.mt.gov/Portals/182/Page%20Files/YRBS/2019YRBS/2019_MT_YRBS_FullReport.pdf?ver=2019-08-23-083248-820.
[8] State of Rhode Island Department of Health, "Rhode Island High School Survey Detail Tables – Weighted Data," *2019 Youth Risk Behavior Survey Results,* 2019, https://health.ri.gov/materialbyothers/yrbs/2019HighSchoolDetailTables.pdf.
[9] Vermont Department of Health, "2017 Vermont Youth Risk Behavior Survey Report Winooski SD Report," 2018, https://www.healthvermont.gov/sites/default/files/documents/pdf/WINOOSKI_SD_%28SU017%29.pdf.
[10] Vermont Department of Health, "2019 Vermont Youth Risk Behavior Survey Statewide Results," March, 2020, https://www.healthvermont.gov/sites/default/files/documents/pdf/CHS_YRBS_statewide_report.pdf.
[11] Virginia Department of Health, "Virginia High School Survey Detail Tables – Weighted Data," *2019 Youth Risk Behavior Survey Results*, 2019, https://www.vdh.virginia.gov/content/uploads/sites/69/2020/06/2019VAH-Detail-Tables.pdf.
[12] Vapor Technology Association, "The Economic Impact of the Vapor Industry Maine," 2021, https://vta.guerrillaeconomics.net/reports/4324c615-72ce-4814-a141-7ad53e812f23?.
[13] Vapor Technology Association, "The Economic Impact of the Vapor Industry Maine," 2018, https://vta.guerrillaeconomics.net/reports/2027bdfd-f427-4bfa-a57b-5258c91973d1?.
[14] Lindsey Stroud, "Youth Vaping Rates Declined More Significantly In States Without Flavor Bans," Independent Womens Forum, April 12, 2023, https://www.iwf.org/2023/04/12/youth-vaping-rates-declined-more-significantly-in-states-without-flavor-bans/.
[15] Lindsey Stroud, "Youth Tobacco and Vapor Product Use Has Declined (Modestly) In Massachusetts," Independent Womens Forum, April 17, 2023, https://www.iwf.org/2023/04/17/youth-tobacco-and-vapor-product-use-has-declined-modestly-in-massachusetts/.
[16] Orzechowski and Walker, "The Tax Burden on Tobacco Historical Compilation Volume 54," 2022. Print.
[17] Campaign for Tobacco-Free Kids, "Actual Annual Tobacco Settlement Payments Received by the States, 1998 – 2022," December 20, 2022 https://www.tobaccofreekids.org/assets/factsheets/0365.pdf.
[18] Campaign for Tobacco-Free Kids, "Appendix A: History of Spending for State Tobacco Prevention Programs," 2023, https://www.tobaccofreekids.org/assets/factsheets/0209.pdf.