

Testimony before the Rhode Island House Finance Committee Regarding Taxing and Regulating Vapor Products Lindsey Stroud, Director, Senior Fellow Taxpayers Protection Alliance March 5, 2024

Chairman Abney, Vice Chairmen Slater and Marszalkowski, and Members of the Committee:

Thank you for your time today to discuss taxing and regulating vapor products in Rhode Island. My name is Lindsey Stroud and I'm a Senior Fellow 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.

While efforts to reduce youth use of age-restricted products is laudable, flawed policies including excessive taxation and prohibiting flavors in e-cigarettes — or tobacco harm reduction products — disregards record lows in youth tobacco use and recent (and continued declines) in youth vapor use. Moreover, this proposal will unfairly punish adults who rely on e-cigarettes to both quit smoking and remain smoke-free.

Key Points:

- In 2022, 59,618 Rhode Island adults (6.7 percent) were currently using e-cigarettes. This is an 8.1 percent increase from 2021 and represents 4,638 additional adults vaping.
- In 2022, of adults currently using e-cigarettes, nearly half (47.1 percent) were between 25 and 44 years old.
- Among Rhode Island adults using e-cigarettes in 2022, 42.2 percent were formerly smoking while 29.5 percent were currently smoking.
- Excise taxes (such as a vapor tax) will disproportionately harm lower income persons. In 2022, more than half (50.1 percent) of adults who were using e-cigarettes reported annual incomes of \$50,000 or less.
- Youth vapor product use has decreased significantly in recent years.
- Between 2019 and 2021, the percent of Rhode Island high schoolers who were currently vaping decreased by 40.9 percent.
- Between 2015 and 2021, the percent of Rhode Island middle schoolers who reported ever and current use of e-cigarettes decrease by 26.3 percent.
- Traditional tobacco product use is at record lows among both middle schoolers and high schoolers in Rhode Island.
- Nationally, youth e-cigarette use has continued to decline. In 2023, 10 percent of U.S. high school students reported current e-cigarette use, while 5.6 percent of U.S. middle schoolers were currently vaping.
- Since at least 2017, Rhode Island high school students are not citing flavors as a main reason for e-cigarette use.



- In 2021, 0.7 percent of Rhode Island youth reported using e-cigarettes because of flavors. The most common reason cited by 11.3 percent of high schoolers was "curiosity," followed by 6.7 percent who cited using them because they were feeling anxious, depressed, and/or stressed, and 4.7 percent who had used them because a friend and/or family member had.
- Nationally, only 13.2 percent of U.S. middle and high school students who were currently vaping in 2021 cited flavors as a reason for using e-cigarettes. Comparatively, 43.5 percent cited using e-cigarettes to get a buzz, 43.2 percent had used them because they were feeling anxious, depressed, and/or stressed, and 27.6 percent had used them because a friend and/or family member had.
- Rhode Island youth are facing a mental health crisis, which is reflected in why youth are using e-cigarettes.
- In 2021 (among Rhode Island high schoolers), 37.8 percent reported persistent feelings of sadness and/or hopelessness, 17.1 percent had considered attempting suicide, 14.5 percent had made a suicide plan, and 9.7 percent had attempted suicide.
- In 2021 (among Rhode Island middle schoolers), 23.2 percent had thought about killing themselves, 16.8 percent had made a suicide plan, and 9.4 had tried to kill themselves.
- In 2021, there were more middle schoolers who had tried to kill themselves (9.4 percent) than vaping (5.6 percent) or about 50.7 percent more middle schoolers had attempted suicide than had vaped.
- Flavors play an important role in adult use of e-cigarettes. A 2018 survey of nearly 70,000 U.S. adult vapers found that 83.2 percent and 72.3 percent of participants reported vaping fruit and dessert flavors, respectively.
- A 2019 user survey found that tobacco flavor was used by less than five percent of adults.
- Rhode Island retailers do a good job in not selling e-cigarette products to youth and minors.
- Between 2018 and 2023, sales of e-cigarette products to minors made up only 3.1 percent of compliance check inspections, and 25.2 percent of products cited for violations.
- The small vapor industry is already in decline and flavor bans and exorbitant taxes will shutter small businesses in the Ocean State.
- Between 2018 and 2023, the economic impact of small vapor in Rhode Island decreased by 47.1 percent and represents an economic loss of more than \$28 million.
- In 2023, small vapor's total economic impact was estimated to be nearly \$31.5 million.
- Rhode Island should allocate more of existing tobacco monies towards tobacco control programs including cessation, education, and prevention efforts.
- Rhode Island collected an estimated \$189.7 million in tobacco-related monies in 2022, yet the state allocated only \$400,000 in state funding towards tobacco control programs, which was a 0 percent change in funding from 2021's levels.
- In 2022, for every \$1 the Ocean State received in tobacco monies, it spent less than \$0.01 on tobacco control efforts.



Rhode Island Adults Need Access to Safer Alternatives to Cigarettes

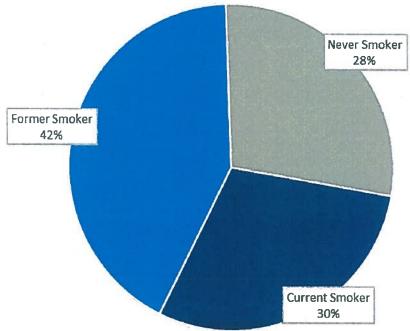
In 2022, according to the Centers for Disease Control and Prevention (CDC), an estimated 59,618 Rhode Island adults (or 6.7 percent) were currently using e-cigarettes. This is an 8.1 percent increase from 2021 when 6.2 percent reported current e-cigarette use. There were an estimated 4,638 additional adults vaping in 2022 compared to 2021.

Among Rhode Island adults currently using e-cigarettes in 2022, 33.1 percent were 18 to 24 years old, 47.1 percent were 25 to 44 years old, 15.8 percent were 45 to 64 years old and 3.9 percent of current e-cigarette users in Rhode Island in 2021 were 65 years or older. In 2022, among adult e-cigarette users in Rhode Island, 66.9 percent were 25 years or older.

In 2022 (according to the CDC), among adult e-cigarette users aged 18 years or older:

- 42.2 percent were formerly smoking
- 29.5 percent were currently smoking
- 28.3 percent had never smoked





In an analysis of 237 Rhode Island adults aged 18 and over who were currently using e-cigarettes in 2022, the average number of years smoked was 24 years. While the total was alarming – 3,770



years of smoking, which would amount to more than 27.5 million cigarettes smoked (figuring for a pack-per-day habit).

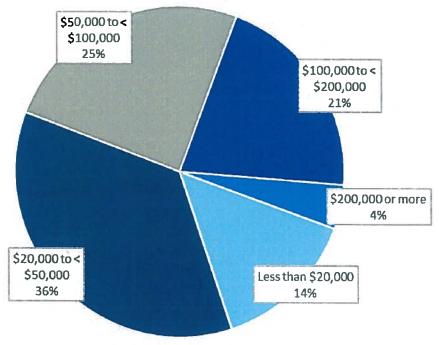
Vapor Product Taxes Harm Lower Income Rhode Island Adults

A vapor product tax will also disproportionately harm lower income persons in the Ocean State who are using e-cigarettes to remain smoke-free.

In an analysis of 209 Rhode Island adults who were currently using e-cigarettes in 2022:

- 23.4 percent reported incomes of \$25,000 or less
- 26.7 percent reported incomes between \$25,000 to \$50,000
- 24.8 percent reported incomes of \$50,000 to 100,000
- 20.6 percent reported incomes of \$100,000 to \$200,000
- 4.3 percent reported incomes of \$200,000 or more

Annual Incomes Among Adult E-Cigarette Users Rhode Island 2024



In fact, more than half of adults who were using e-cigarettes in 2022 reported incomes of \$50,000 or less.



E-cigarettes, as an alternative to cigarettes help adults transition away from combustible cigarettes. Limiting the options available to adults could lead to increases in smoking.

Youth Tobacco and Vapor Product Use at Record Lows in Rhode Island

While lawmakers can be lauded for working to prevent youth use of age-restricted products, they should be aware that existing policies have helped to decrease youth use of vapor products in recent years. Further, use of traditional tobacco products is at record lows — and should be celebrated.

In 2021, according to the CDC's Youth Risk Behavior Survey (YRBS), among Rhode Island high school students: ²

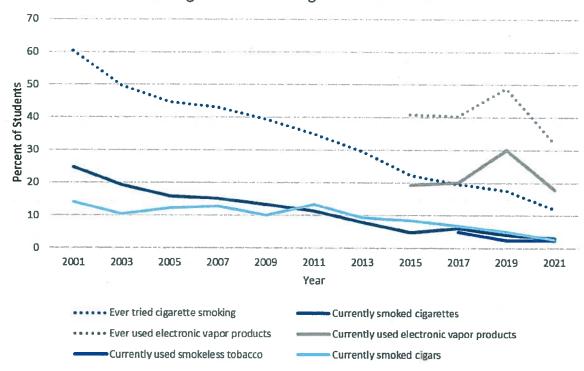
- 32 percent had ever tried an e-cigarette
- 17.8 percent were currently using e-cigarettes
- 11.9 percent had ever tried a combustible cigarette
- Three percent were currently smoking combustible cigarettes
- 2.7 percent were currently smoking cigars.
- 2.5 percent were currently using smokeless tobacco products

Among Rhode Island high schoolers, youth vaping peaked in 2019 when nearly half (48.9 percent) had ever-tried an e-cigarette and nearly one-third (30.1 percent) reported current use. Between 2019 and 2021, among high schoolers:

- Frequent (20 or more days in the 30 days prior) use decreased by 43.1 percent
- Current use of e-cigarettes decreased by 40.9 percent
- Daily e-cigarette use decreased by 37 percent
- Ever-use of e-cigarettes decreased by 34.6 percent



Tobacco & Vapor Product Use Among Rhode Island High School Students



Traditional tobacco product use among high schoolers is at record lows and contrasts the idea that e-cigarettes have normalized use of combustible tobacco products.

In 2001, nearly two-thirds (60.2 percent) of Rhode Island high schoolers had ever tried a combustible cigarette, while nearly one-fourth (24.8 percent) reported current use. Between 2001 and 2021, ever-use of combustible cigarettes decreased by 80.2 percent, while current use of cigarettes decreased by 87.9 percent.

In 2001, 14 percent of Rhode Island high school students reported currently using cigars. Between 2001 and 2021, current cigar use declined by 80.7 percent.

Current use of smokeless tobacco products halved between 2017 and when five percent of students reported use, to 2.5 percent in 2021.

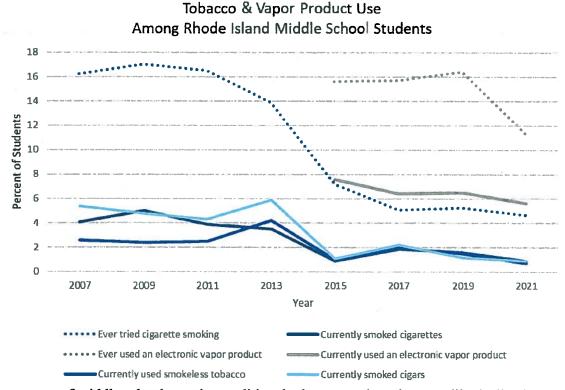
Among Rhode Island middle school students:

- 11.3 percent had ever tried an e-cigarette
- 5.6 percent were currently using e-cigarettes (defined as having used the product on at least one occasion in the 30 days prior)



- 4.7 percent had ever tried a combustible cigarette
- 0.9 percent were currently smoking combustible cigarettes
- 0.9 percent were currently smoking cigars.
- 0.7 percent were currently using smokeless tobacco

Among middle school students, current use of e-cigarettes peaked in 2015 when 7.6 percent reported currently using e-cigarettes. Ever-use of e-cigarettes peaked in 2019 when 16.4 percent reported having ever tried an e-cigarette. Between 2015 and 2021, current e-cigarette use among Rhode Island middle schoolers declined by 26.3 percent. Between 2019 and 2021, ever-use of e-cigarettes among middle school students decreased by 31.1 percent.



The percent of middle schoolers using traditional tobacco products has steadily declined over the past two decades and is now at record lows in the Ocean State.

Between 2007 and 2021, ever-use of cigarettes among middle school students declined by 71 percent, while current use decreased by 78 percent. During the same period, current cigar use declined by 73.1 percent, and current use of smokeless tobacco decreased by 57.1 percent.

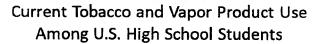
Nationally, Youth Tobacco and Vapor Product Use Continues to Decline

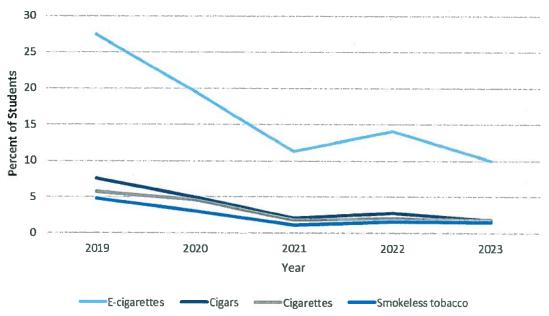


In 2023, according to the CDC's National Youth Tobacco Survey (NYTS), among U.S. high school students:

- 10 percent were currently using e-cigarettes
- 1.9 percent were currently using combustible cigarettes
- 1.8 percent were currently using cigars
- 1.5 percent were currently using smokeless tobacco products

Vaping peaked among U.S. high school students in 2019 when 27.5 percent were currently vaping. Between 2019 and 2023, current e-cigarette use among U.S. high schoolers decreased by 63.6 percent. Further, these decreases have continued. Between 2022 and 2023, current e-cigarette use among U.S. high school students decreased by 29.1 percent.



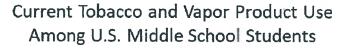


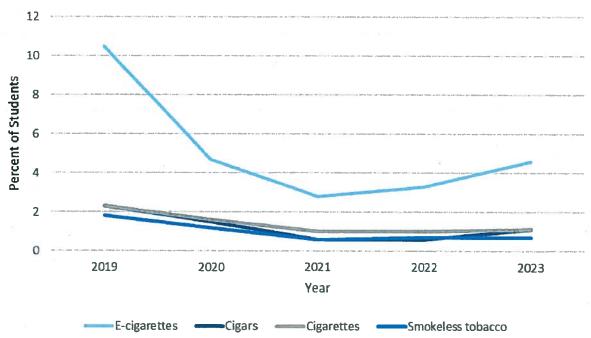
Among U.S. middle school students:

- 5.6 percent were currently using e-cigarettes
- 1.1 percent were currently using combustible cigarettes
- 1.1 percent were currently using cigars
- 0.7 percent were currently using smokeless tobacco products



Vaping peaked among U.S. middle school students in 2019 when 10.5 percent were currently vaping. Between 2019 and 2023, current e-cigarette use among U.S. middle schoolers decreased by 56.2 percent.





Rhode Island (and U.S.) Youth Are Not Citing Flavors As Reason For E-Cigarette Use

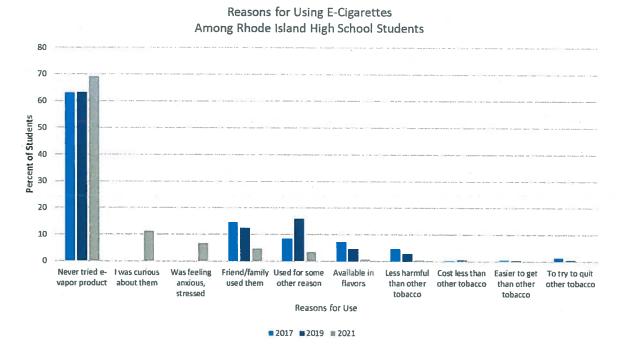
Despite alarmism, flavors are not the main driver of youth e-cigarette use, and are in fact, essential in both assisting adults to transition away from combustible cigarettes, as well as remain smoke-free.

In 2021, according to the CDC's YRBS, among Rhode Island highschoolers:³

- 11.3 percent had used e-cigarettes because they were "curious about them"
- 6.7 percent had used e-cigarettes because they were "feeling anxious, stressed, or depressed"
- 4.7 percent had used e-cigarettes because a friend and/or family member had used them
- 3.4 percent cited "other" as a reason for use
- 0.7 percent had used them because they were "available in flavors"



• 0.3 percent had used them because they were "less harmful than other tobacco"



In fact, since 2017, flavors have not been the most cited reason for using e-cigarettes. In 2017, among Rhode Island high school students:⁴

- 14.5 percent had used them because a friend and/or family member had
- 8.4 percent cited "other"
- 7.2 percent had used them because of flavors
- 4.6 percent had used them because they are "less harmful than other tobacco"
- 1.4 percent had used them because they were trying to "quit other tobacco"
- 0.5 percent cited using them because they were "easier to get than other tobacco"
- 0.3 percent had used them because they "cost less than other tobacco"

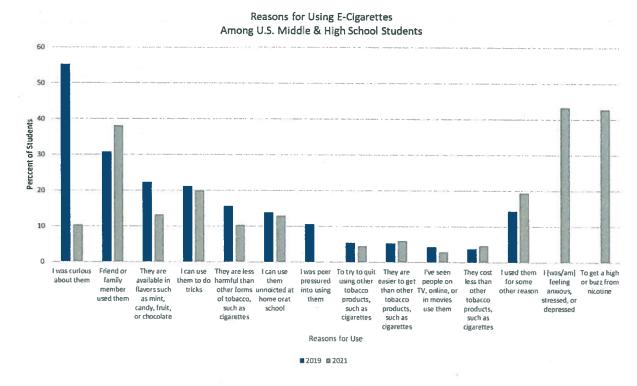
In 2019, among Rhode Island high school students:⁵

- 15.9 percent had used e-cigarettes for "some other reason"
- 12.5 percent had used them because a friend and/or family member had
- 4.5 percent cited using them because of flavors
- 2.7 percent had used them because they are "less harmful than other tobacco"
- 0.4 percent had used them because they were trying to "quit other tobacco"
- 0.4 percent had used them because they "cost less than other tobacco"
- 0.3 percent cited using them because they were "easier to get than other tobacco"



Nationally, youth are not using e-cigarettes because of flavors. According to the NYTS, in 2021, among U.S. middle and high school students who were currently using e-cigarettes in 2021:⁶

- 43.5 percent reported using them to get a high and/or buzz
- 43.2 percent had used them because they were feeling anxious, stressed and/or depressed
- 27.6 percent reported using them because a friend and/or family member had used them
- 19 percent reported "other"
- 13.2 percent reported using them because of flavors
- 10.3 percent reported using them because they were less harmful than other tobacco products



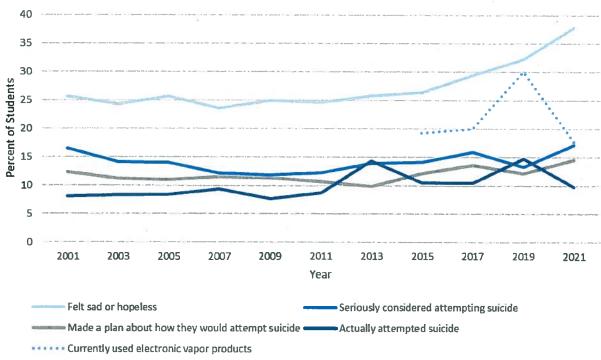
Lawmakers Should Focus on Youth Mental Health Crisis

If lawmakers truly want to reduce youth e-cigarette use, they should focus on ways to improve mental health among youth. According to the 2021 YRBS, among Rhode Island high schoolers:⁷

- 37.8 percent reported persistent feelings of sadness and/or hopelessness
- 17.1 percent had "considered attempting suicide"
- 14.5 percent had "made a plan about how they would attempt suicide"
- 9.7 percent had actually attempted suicide.







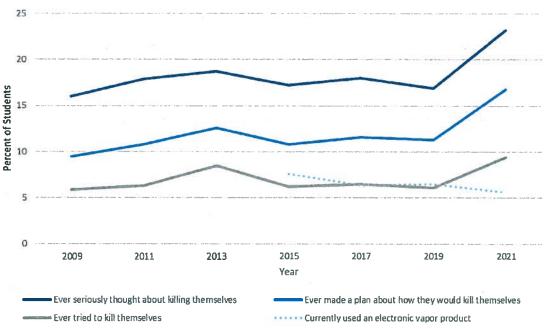
These are some of the highest levels of youth mental health distress recorded in the Ocean State. Between 2019 and 2021, the percentage of youth reporting persistent feelings of sadness and/or hopelessness increased by 17 percent, the percentage of youth considering suicide increased by 28.6 percent, and the percentage of youth who made suicide plans increased by 19.8 percent. Fortunately, the percentage of youth who attempted suicide did increase by 34 percent, but it is still rather high given previous years.

Among Rhode Island middle schoolers in 2021:

- 23.2 percent reported they had "seriously thought about killing themselves"
- 16.8 percent reported they had made a suicide plan
- 9.4 percent reported they had tried to kill themselves.







Again, this is a crisis among Rhode Island middle schoolers. Between 2019 and 2021, the percentage of Ocean State middle schoolers who had thought about killing themselves increased by 37.3 percent; the percentage of middle schoolers who had made a suicide plan increased by 48.7 percent, while the percentage of youth who had tried to killed themselves increased by an alarming 54.1 percent.

Flavors Play Important Role in Adult E-Cigarette Use

But for adults, flavors provide a unique benefit, and are used in traditional tobacco cessation products including gums. And numerous surveys and studies of adults using e-cigarettes find flavors play an essential role in tobacco harm reduction.

A 2018 survey of nearly 70,000 American adult vapers "found flavors play a vital role in the use of electronic cigarettes and vaping devices." In fact, 83.2 percent and 72.3 percent of survey respondents reported vaping fruit and dessert flavors, respectively. Most respondents indicated restricting flavors would make vaping "less enjoyable."

Analysis of EcigIntelligence's 2019 user survey found that fruits, sweets and candy, and desserts and bakery flavors "are among the most preferred flavors across all age groups." Use of tobacco flavor was preferred by less than 5 percent of those who vape. If legal sales were restricted to tobacco flavor only, 69 percent of respondents said they would try to acquire their flavors from



alternative methods and 25 percent stated that they would be willing to drive over 100 miles to obtain supply. This illustrates that flavors are important to the appeal of vaping over smoking and that proposals to ban flavored vaping products are more an attempt at prohibition by stealth than a serious public health measure.

A 2020 study found an association between flavors and smoking cessation. In a cohort study of more than 17,900 participants, the authors found that "adults who began vaping nontobacco-flavored e-cigarettes were more likely to quit smoking than those who vaped tobacco flavors." ¹⁰

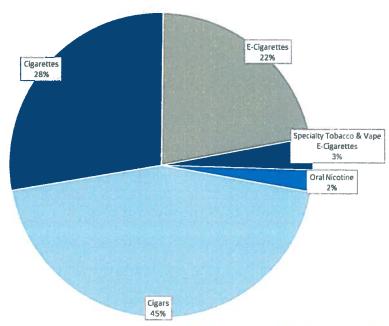
Retailers and Specialty Tobacco and Vape Shops Already Do Good Job In Preventing Underage Sales

The U.S. Food and Drug Administration (FDA) routinely sends underaged persons into tobacco and vapor product retailers in attempts to purchase tobacco and vape products. Between January 1, 2018 and December 31, 2023, the FDA conducted 4,509 inspections for Rhode Island retailers, which resulted in 560 violations (i.e., sales to minors), or a 12.4 percent failure rate.

These violations included the following sales to minors:

- 249 cigar purchases
- 156 cigarette purchases
- 141 e-cigarette purchase
- 13 oral nicotine product purchases

FDA Compliance Check Sales to Minors January 1, 2018 - December 31, 2023



Taxpayers Protection Alliance, 1101 14th St. NW, Ste 1101, Washington, D.C. 20005 (202) 930-1716, www.protectingtaxpayers.org



E-cigarette violations made up only 3.1 percent of all inspections, and 25.2 percent of all violations.

Of the inspections, FDA conducted approximately 217 inspections on retailers in the state which had "vap" or "smok" in the retail establishment's name. Of those, 39 resulted in violations, which was a 0.9 percent failure rate to total inspections and a seven percent failure rate among all violations.

Of the specialty tobacco and vape shops who were inspected by the FDA, 19 were cited with violations for selling e-cigarettes to minors. Vape and smoke shops made up only 13.5 percent of retailers who were cited for selling e-cigarettes to minors in Rhode Island between January 2018 and December 2023.

Retailers in the Ocean State are doing a good job in not selling e-cigarette products to youth and minors. This legislation ignores this and unfairly punishes responsible business owners.

Legislation Will Shutter Small Business in the Ocean State

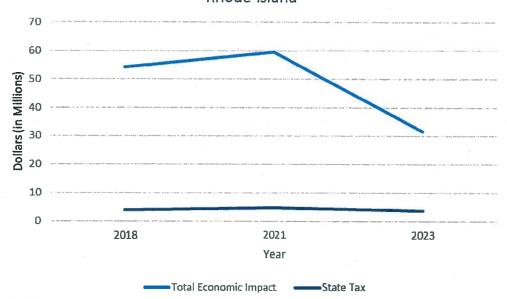
Moreover, this bill will shutter small vapor in Rhode Island – and wipe out the economic benefits vaping provides to the state.

According to the Vapor Technology Association (VTA), in 2023, the vapor industry provided more than \$11.9 million in wages related to vaping jobs. ¹¹ In 2023, the vape industry provided more than \$3.7 million in state taxes to Rhode Island. In fact, VTA estimates vapes total economic impact to the state in 2023 to be nearly \$31.5 million. Should this legislation pass, all of that would be eliminated.

It should be noted that small vapor is already suffering in the Ocean State. In fact, the total economic impact of Rhode Island's small vaping industry decreased by 47.1 percent between 2021 and 2023, representing a loss of more than \$28 million in economic output.



Small Vapor Economic Impact Rhode Island



Proposal Will Stunt Tobacco Harm Reduction Options for Adults

Numerous public health agencies – including American and other countries – have found ecigarettes to both reduce harm and help adults quit smoking.

The FDA has noted that "transitioning completely from using cigarettes to an e-cigarette would reduce the risk of exposure to harmful chemicals." The agency has even authorized the sale of a handful of e-cigarettes, finding these products to be "appropriate for the protection of public health." ¹³

The CDC has stated that e-cigarettes are "less harmful than regular cigarettes, with e-cigarette "aerosol generally [containing] fewer toxic chemicals" than what is found in combustible cigarette smoke. 14

In the United Kingdom, public health agencies including the UK Royal College of Physicians (RCP) and Public Health England (PHE) promote the use of e-cigarettes for adults who smoke and are unable to simply quit cigarettes. RCP states that e-cigarettes are unlikely to exceed 5 percent of the risks from smoking. PHE has found that "vaping poses a small fraction of the risks of smoking." Last year, the UK government gave away 1 million free e-cigarette products in a campaign to reduce smoking rates. 17

The New Zealand Ministry of Health has declared that "vaping products are much less harmful than smoking ... [and that people who smoke] switching to vaping products are highly likely to reduce the risks to their health and those around them." 18



Backwards proposals such as excessive taxation and prohibitions restricts and limits adult access to safer nicotine products while disregarding the developments made in reducing the tobacco burden.

Rhode Island Should Dedicate More of Existing Tobacco Monies on Tobacco Control Programs

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 2022, the Ocean State collected \$136.8 million in state excise tax revenue from combustible cigarettes. ¹⁹ This was a 6.9 percent decrease from 2021's \$146.9 million, or \$10.1 million less. Between 2002 and 2022, Rhode Island collected more than \$2.6 billion in cigarette taxes.

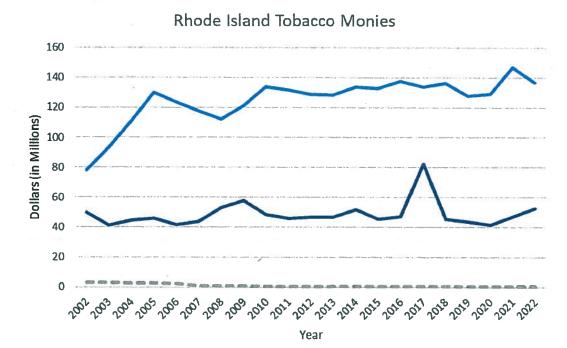
Since 2000, Rhode Island has collected annual payments from tobacco manufacturers based on the percentage of cigarettes and tobacco products sold in the state in that year. Rhode Island collected \$52.9 million in settlement payments in 2022, a 12.6 percent increase from 2021's \$47 million, or an additional \$5.9 million. Since 2002, the Ocean State collected more than \$1 billion in tobacco settlement payments.

While Rhode Island collected an estimated \$189.7 million in tobacco-related monies in 2022, the state allocated only \$400,000 in state funding towards tobacco control programs, including cessation, education, and youth prevention efforts, which was a 0 percent change in funding from 2021's \$400,000. This amounts to 0.3 percent of taxes and 0.8 percent of settlement payments. In 2022, for every \$1 the state received in tobacco monies, it spent less than \$0.01 on tobacco control efforts.

To put it in further perspective, in 2021, over 104,000 Rhode Islander adults were smoking. The same year, the state collected \$136.8 million in state cigarette excise taxes, yet only spent \$400,000 on tobacco control programs. Essentially, Rhode Island received at least \$1,302.87 from each adult smoking in 2021, yet spent only \$3.81 on tobacco control programs for each adult who was smoking that year.

Simply, if lawmakers want to help further reduce youth and adult tobacco and vapor product use, they ought to invest more into existing programs including education and prevention efforts.





Conclusion

Cigarette Taxes

With youth vaping having consistently declined in recent years, and youth use of traditional tobacco products at record lows, it is not necessary for Rhode Island policymakers to impose excessive taxation on e-cigarettes while prohibiting options of flavors for the tens of thousands of Rhode Islander adults who use e-cigarettes to quit smoking.

Settlement Payments

Tobacco Control Funding



¹ Lindsey Stroud, "Tobacco & Vaping 101: Rhode Island," *Taxpayers Protection Alliance*, Jan. 18, 2024, https://www.protectingtaxpayers.org/analysis/tobacco-vaping-101-Rhode Island-4/.

² Centers for Disease Control and Prevention, "Rhode Island 2021 Results," Youth Risk Behavior Survey, 2023, https://nccd.cdc.gov/Youthonline/App/Results.aspx?LID=RI.

³ State of Rhode Island Department of Health, "2021 Youth Risk Behavior Results – Rhode Island High School Survey Detail Tables – Weighted Data," 2021,

https://health.ri.gov/materialbyothers/yrbs/2021HighSchoolDetailTables.pdf.

⁴ State of Rhode Island Department of Health, "2017 Youth Risk Behavior Results – Rhode Island High School Survey Detail Tables – Weighted Data," 2017,

https://health.ri.gov/materialbyothers/yrbs/2017HighSchoolDetailTables.pdf.

⁵ State of Rhode Island Department of Health, "2019 Youth Risk Behavior Results – Rhode Island High School Survey Detail Tables – Weighted Data," 2019,

https://health.ri.gov/materialbyothers/yrbs/2019HighSchoolDetailTables.pdf.

⁶ Andrea S. Gentzke, PhD *et al.*, "Tobacco Product Use and Associated Factors Among Middle and High School Students — National Youth Tobacco Survey, United States, 2021," Mar. 11, 2022, https://www.cdc.gov/mmwr/volumes/71/ss/ss7105a1.htm.

⁷ Centers for Disease Control and Prevention, supra note 2.

⁸ Konstantinos Farsalinos, "Submitting to the FDA the findings of the largest ever survey on e-cigarette flavors use by US vapers," E-Cigarette Research, August 11, 2008, http://www.ecigarette-research.org/research/index.php/whats-new/2018-2/266-us-flav.

⁹ Consumer Advocates for Smoke-free Alternatives Association, "ECigintelligence User Survey 2019," August 25, 2020, https://casaa.org/ecigintelligence-user-survey-2019/.

¹⁰ Abigail S. Friedman and SiQing Xu, "Associations of Flavored e-Cigarette Uptake With Subsequent Smoking Initiation and Cessation," JAMA, June 5, 2020, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7275248/.

¹¹ Vapor Technology Association, "The Economic Impact of the Vapor Industry 2021 – Rhode Island," 2023, https://vta.guerrillaeconomics.net/reports/10e2577c-0efd-4106-9e57-e456c11159e2?.

¹² U.S. Food and Drug Administration, "Facts about E-Cigarettes," Jul. 7, 2023, https://www.fda.gov/news-events/press-announcements/fda-issues-decisions-additional-e-cigarette-products.

¹³ U.S. Food and Drug Administration, "FDA Issues Decisions on Additional E-Cigarette Products," FDA News Release, Mar. 24, 2022, https://www.fda.gov/news-events/press-announcements/fda-issues-decisions-additional-e-cigarette-products.

¹⁴ Centers for Disease Control and Prevention, "About Electronic Cigarettes (E-Cigarettes)," Smoking & Tobacco Use, Nov. 2, 2023, https://www.cdc.gov/tobacco/basic_information/e-cigarettes/about-e-cigarettes.html.

¹⁵ Royal College of Physicians, "E-cigarettes and non-combustible inhaled tobacco products," Sept. 2017, https://www.rcgp.org.uk/representing-you/policy-areas/e-

cigarettes#:~:text=Public%20Health%20England%20and%20the,from%20conventional%20smoking13%2C14...

¹⁶ Public Health England, "Nicotine vaping in England: 2022 evidence update main findings," Sept. 29, 2022, https://www.gov.uk/government/publications/nicotine-vaping-in-england-2022-evidence-update-main-findings.

¹⁷ Department of Health and Social Care, "Smokers urged to swap cigarettes for vapes in world first scheme," GOV.UK, Apr. 11, 2023, https://www.gov.uk/government/news/smokers-urged-to-swap-cigarettes-for-vapes-in-world-first-scheme

18 New Zealand Ministry of Health, "Position statement on vaping," Sept. 3, 2020, https://web.archive.org/web/20230214002612/https://www.health.govt.nz/our-work/preventative-health-wellness/tobacco-control/vaping-smokefree-environments-and-regulated-products/position-statement-vaping.

¹⁹ Lindsey Stroud, supra note 1.

Tobacco & Vaping 101:

Rhode Island 2024

Lawmakers are often bombarded with misinformation on the products used by adults in their state. This annual analysis provides up-to-date data on the adults who use cigarettes and e-cigarette products in the Ocean State. This information also includes data on youth use, impacts of e-cigarettes and analyses of existing tobacco monies.

Key Points:

• In 2022, 104,999 Rhode Island adults (11.8 percent) were currently smoking. This is a 4.8 percent decrease from 2021 and represents 4,962 fewer adults smoking.

• In 2022 (among all Rhode Island adults), 4.3 percent of 18- to 24-year-olds, 14 percent of 25-44-year-olds, 15.3 percent of 45-64-year-olds, and 8.4 percent of adults aged 65 years or older were currently smoking combustible cigarettes.

• Among all adults earning \$25,000 or less in 2022, 19.4 percent were currently smoking compared to only 7.4 percent of adults earning \$50,000 or more.

• Among all smoking adults in Rhode Island in 2022, 72.2 percent were White, 16.6 percent were Hispanic, 7.5 percent were Multiracial (non-Hispanic), 3.3 percent were Asian, and less than one percent were Black.

• In 2022, 59,618 Rhode Island adults (6.7 percent) were currently using e-cigarettes. This is a 8.1 percent increase from 2021 and represents 4,638 additional adults

vaping.

• Among all vaping adults in Rhode Island in 2022, 33.1 percent were 18 to 24 years old, 47.1 percent were 25 to 44 years old, 15.8 percent were 45 to 64 years old and 3.9 percent were 65 years or older.

• In 2021, for every one Rhode Island high school student who was smoking, more than 81 adults were currently using cigarettes.

• In 2021, for every one Rhode Island high school student who was vaping, more than six adults were currently using e-cigarettes.

• 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 2018 and 2022, smoking rates among Rhode Island adults aged 18 to 24 years old decreased by 67.2 percent.

- Cigarette excise taxes in Rhode Island disproportionately impact low income, low education persons, while failing to significantly reduce smoking rates among that class.
- The percentage of Rhode Island adults earning \$25,000 or less that were smoking decreased by 22.7 percent between 2018 and 2022, while the percent of adults earning \$50,000 or more that were smoking decreased by 27.1 percent during the same period.

Among Rhode Island adults who did not graduate high school, smoking rates decreased by 25.1 percent, yet rates among adults with a college degree decreased by

16.4 percent.

• Rhode Island 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 2022, for every \$1 the state received in tobacco monies, it spent less than \$0.01 on tobacco control efforts.

Tobacco & Vaping 101:

Rhode Island 2024

Adult Combustible Cigarette and E-Cigarette Use

IIn 2022, according to data from the annual Behavioral Risk Factor Surveillance System survey, conducted by the Centers for Disease Control and Prevention, an estimated 104,999 adults (or 11.8 percent of Rhode Islanders) were currently smoking. This is a 4.8 percent decrease from 2021 when 12.4 percent reported current cigarette use. There were 4,962 fewer adults smoking in 2022 compared to 2021.

In 2022 (among all Rhode Island adults), 4.3 percent of 18- to 24-year-olds, 14 percent of 25-44-year-olds, 15.3 percent of 45-64-year-olds, and 8.4 percent of adults aged 65 years or older were currently smoking combustible cigarettes.

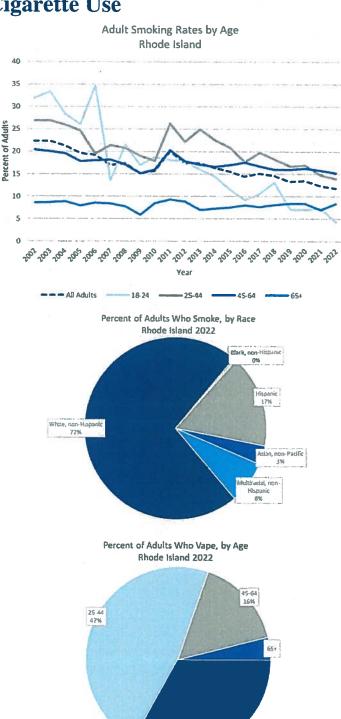
Among all adults earning \$25,000 annually or less in 2021, nearly one-fifth (19.4 percent) reported currently smoking, compared to only 7.4 percent of adults who earned \$50,000 or more per year.

In Rhode Island, Multiracial (non-Hispanic) adults reported smoking at a greater percentage of their identified race at 27.1 percent. This is compared to 11.6 percent of Hispanic adults, 11.1 percent of White adults, 8.8 percent of Asian adults, and 8.1 percent of Black adults.

Yet, White adults made up a significantly larger percentage of Rhode Island's total adult smoking population. In 2022, White adults accounted for 72.2 percent of the Rhode Island's current smoking population, compared to Multiracial (non-Hispanic) adults, who made up only 7.5 percent. Hispanic adults accounted for 16.6 percent, Asian adults made up 3.3 percent, and Black adults accounted for less than one percent of Rhode Island's adult smoking population in 2022.

In 2022, an estimated 59,618 Rhode Island adults (or 6.7 percent) were currently using e-cigarettes. This is an 8.1 percent increase from 2021 when 6.2 percent reported current e-cigarette use. There were an estimated 4,638 additional adults vaping in 2022 compared to 2021.

Among Rhode Island adults currently using e-cigarettes in 2022, 33.1 percent were 18 to 24 years old, 47.1 percent were 25 to 44 years old, 15.8 percent were 45 to 64 years old and 3.9 percent of current e-cigarette users in Rhode Island in 2021 were 65 years or older. Among adult e-cigarette users in Rhode Island in 2022, 66.9 percent were 25 years or older.



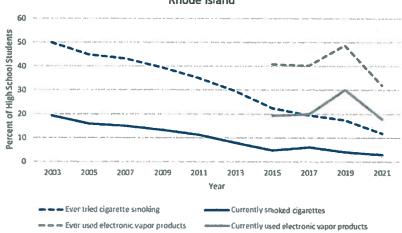
Tobacco & Vaping 101: Rhode Island 2024

Youth Combustible Cigarette and E-Cigarette Use

Youth smoking rates are at historic lows in the Ocean State. In 2021, 11.9 percent of high school students reported ever trying combustible cigarettes, while three percent reported currently smoking, or having used the product on at least one occasion in the 30 days prior. In 2021, approximately 1,352 Rhode Island high school students were smoking, compared to an estimated 109,961 Rhode Island adults aged 18 and over who were currently smoking. For every one high schooler student smoking in 2021 in Rhode Island, more than 81 adults were currently smoking.

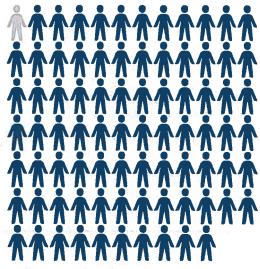
Youth vaping peaked in the Ocean State in 2019 when nearly half (48.9 percent) of Rhode Island high school students reported having ever used an e-cigarette and nearly one-third (30.1 percent) reported current use. Between 2019 and 2021, lifetime e-cigarette use among Rhode Island high schoolers declined by 34.6 percent to 32 percent of students. Current use decreased by 40.9 percent to 17.8 percent of Rhode Island high school students. In 2021, approximately 8,020 Rhode Island high school students were vaping, compared to 54,981 Rhode Island adults aged 18 and over who were currently vaping. For every one high schooler vaping in 2021 in Rhode Island, more than six adults were using e-cigarettes.

High School Cigarette and E-Cigarette Use Rhode Island



Youth to Adult Smoking Ratio

Rhode Island 2021



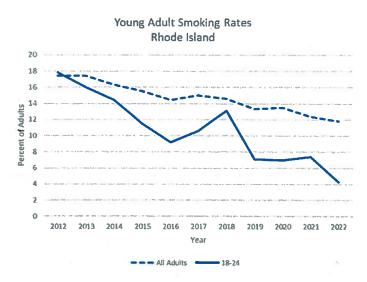
Youth to Adult Vaping Ratio Rhode Island 2021





Tobacco & Vaping 101:

Rhode Island 2024



Young Adult Cigarette Use

The introduction of e-cigarettes has not led to increases in young adult cigarette smoking, but rather, correlates with significant declines.

In 2012, e-cigarettes were available in every major U.S. market. That same year, 17.8 percent of Rhode Islanders aged 18 to 24 years old were currently smoking. In 2018, public health purported a so-called "youth vaping epidemic," and 13.1 percent of young adults in the Ocean State were smoking. Between 2012 and 2018, young adult smoking rates declined by 26.4 percent. Further, since 2018, young adult smoking rates have decreased another 67.2 percent, with average annual declines of 20.8 percent.

In 2016 (among 18- to 24-year-olds), 9.2 percent and 10 percent were currently using combustible cigarettes and ecigarettes, respectively. Between 2016 and 2021, current cigarette use among young adults decreased by 53.3 percent while vapor product use increased by 78 percent.

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

Effects of Cigarette Excise Taxes

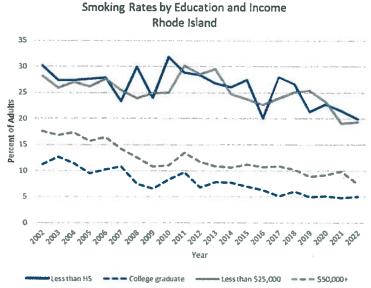
Rhode Island last increased its state cigarette excise tax in 2017 from \$3.75 to \$4.25-per-pack.

Lawmakers often justify excise taxes on cigarettes to deter persons from using combustible cigarettes.

These taxes not only disproportionately harm lower income and lower educated adults, the taxes also fail to significantly reduce smoking rates among those persons.

The percent of Rhode Island adults earning \$25,000 or less that were smoking decreased by 22.7 percent between 2018 and 2022, while the percent of adults earning \$50,000 or more that were smoking decreased by 27.1 percent during the same period. Among Rhode Islanders who did not graduate high school, smoking rates decreased by 25.1 percent, yet rates among adults with a college degree decreased by 16.4 percent.

Lawmakers should refrain from enacting further increases in cigarette taxes given their disproportionate effect on low-income and low-educated persons, while failing to reduce smoking rates.



Tobacco & Vaping 101:

Rhode Island 2024

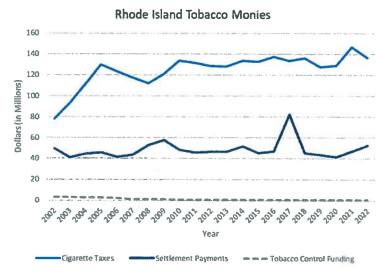
Tobacco Monies

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 2022, the Ocean State collected \$136.8 million in state excise tax revenue from combustible cigarettes. This was a 6.9 percent decrease from 2021's \$146.9 million, or \$10.1 million less. Between 2002 and 2022, Rhode Island collected more than \$2.6 billion in cigarette taxes.

Since 2000, Rhode Island has collected annual payments from tobacco manufacturers based on the percentage of cigarettes and tobacco products sold in the state in that year. Rhode Island collected \$52.9 million in settlement payments in 2022, a 12.6 percent increase from 2021's \$47 million, or an additional \$5.9 million. Since 2002, the Ocean State collected more than \$1 billion in tobacco settlement payments.

While Rhode Island collected an estimated \$189.7 million in tobacco-related monies in 2022, the state allocated only \$400,000 in state funding towards tobacco control programs, including cessation, education, and youth prevention efforts, which was a 0 percent change in funding from 2021's \$400,000. This amounts to 0.3 percent of taxes and 0.8 percent of settlement payments. In 2022, for every \$1 the state received in tobacco monies, it spent less than \$0.01 on tobacco control efforts.



References

- 1. Data on adult smoking rates comes from the Centers for Disease Control's Behavioral Risk Factor Surveillance Survey including sections on "Demographics - Race," Tobacco Use - All Categories," and "E-Cigarette Use." Accessed November, 2023. https://www.cdc.gov/brfss/brfssprevalence/.
- 2. Data on race and age was compiled using population data from the Annie E. Casey Foundation (https://datacenter.kidscount.org/) and Demographic data from the CDC to cross reference the racial population. Then, data from Smoking and Race, and E-Cigaretts and Age, was used to determine the percent of adults who were smoking in 2022.
- 3. Data on youth tobacco and vapor product use comes from the CDC's Youth Risk Behavior Survey, accessed in November, 2023. https://www.cdc.gov/tobacco/data_statistics/surveys/nyts/index.htm.

 4. Data on tax information comes from Orzechowski and Walker, "The Tax Burden on Tobacco Historical Compilation
- Volume 57, 2022. Print.
- 5. Data on tobacco settlement payments is from Campaign for Tobacco-Free Kids, "Actual Annual Tobacco Settlement Payments Received by the States, 1998-2022." Accessed November, 2023. https://www.tobaccofreekids.org/assets/factsheets/0365.pdf.
- Data on tobacco control funding is from Campaign for Tobacco-Free Kids, "Appendix A: A Hisotry of Spending for State Tobacco Prevention Programs," Accessed November, 2023. https://www.tobaccofreekids.org/assets/factsheets/0209.pdf.



An estimated 30.8 million American adults smoked in 2020, or approximately 12.5 percent of the U.S. population.[1] Smoking-related disease and deaths cost the United States more than \$300 billion each year, including \$225 billion attributed to medical costs and more than \$156 billion due to lost productivity.[2]

For many years, policymakers have staunchly pushed forward with only one approach: quit or die. This failed method of smoking prevention and cessation has negligibly reduced smoking rates over the years. Yet, there is another approach: tobacco harm reduction for those who are unwilling or unable to quit smoking. In 1976, famed tobacco research Michael Russell remarked "people smoke for the nicotine, but die from the tar." [3] Today, cigarettes contain nearly 600 ingredients and when ignited release more than 7,000 chemicals in the tobacco smoke, including 69 which are known to cause cancer. [4]

Nicotine, while not benign, is not responsible for causing cancer or the other ill effects caused by combustible cigarette smoke. In fact, the U.S. Food and Drug Administration,[5] the Centers for Disease Control and Prevention,[6] and the American Cancer Society[7] all acknowledge that nicotine has addictive properties but is not responsible for the harms caused by various tobacco products.

Given that nicotine itself is not the harm-causing property of tobacco, consumers and manufacturers have moved forwarded with giving adults the options to try and switch to less harmful tobacco products, otherwise known as tobacco harm reduction.

Tobacco harm reduction takes into account the science and the individual, all the while reducing the harms related to cigarette smoking. Rather than shaming persons addicted to nicotine, tobacco harm reduction offers them an opportunity to use a less harmful product, while delivering nicotine in a manner that is effective at reducing their cravings.

Reduced harm tobacco products include: electronic cigarettes/vaping devices, heated tobacco products, nicotine replacement therapy, and smokeless and snus products. These products deliver nicotine to adult consumers in a manner that is significantly less harmful than combustible cigarettes. Moreover, there is a plethora of evidence to their reduced risks.

- E-Cigarettes: Despite media alarmism, e-cigarettes are significantly less harmful than combustible cigarettes, as noted by numerous public health agencies. In 2015, Public Health England found e-cigarettes to be 95 percent less harmful than combustible cigarettes.[8] In 2021, the agency noted that "vaping is positively associated with quitting smoking successfully."[9] In 2016, the UK Royal College of Physicians declared that e-cigarettes were unlikely to exceed five percent of the harms that are caused by smoking.[10] Not only does the UK government subsidize e-cigarettes as a cessation tool for people who smoke, vape shops can be found in hospitals in the country. In the United States, in 2018, of the estimated 10 million vapers, approximately 3 million had previously used combustible cigarettes.[11] In 2021, the FDA, through a new regulatory pathway, authorized the first e-cigarette product, finding that the product is "significantly less toxic than combusted cigarettes" and "could benefit addicted adult smokers who switch ... by reducing their exposure to harmful chemicals."[12]
- Heated Tobacco: The US FDA has not only allowed for the marketing of a heated tobacco product, the manufacturer has been permitted to market it with a reduced risk claim, including that due to the product heating tobacco and not burning it, the process "significantly reduces the production of harmful and potentially harmful chemicals." [13] While the rollout in America has been limited (and currently hindered by a patent dispute), in other countries, heated tobacco products have been linked to significant reductions in adult smoking rates. A 2020 study by the American Cancer Society remarked that heated tobacco products "likely reduced cigarette sales in Japan." [14]



- Nicotine pouches: Nicotine pouches are used the same way as snus but deliver nicotine via infused fillers like plant-based fibers instead of pasteurized tobacco. They are the newest innovation on the nicotine market and they are as or less harmful than snus. As a result, they have been rising in popularity across the world. For example, a May 2022 study assessed the potential effect of nicotine pouches if introduced in the U.S. in 2000. The study estimated there would have been about 700,000 fewer deaths by 2050.
- Nicotine Replacement Therapy (NRT): NRT is the most endorsed form of tobacco harm reduction and is subsidized by federal and state health care quit-smoking programs. NRT includes gums, patches, lozenges, and prescription medication. Studies have found that similar rates of cessation success among users of various NRT products and smokeless and snus products.[15] Other tobacco harm reduction products have been found to be more effective. For example, a 2019 randomized controlled trial found that e-cigarettes were almost twice as effective as NRT in aiding in smoking cessation.[16]
- Smokeless: Smokeless tobacco poses much lower risks than smoking, all while containing nicotine. A 2009 Biomed Central study analyzed 89 studies of smokeless tobacco use and cancer finding "very little evidence" of smokeless tobacco producing elevated cancer risks.[17] A 2011 review of epidemiologic studies found that snus and smokeless tobacco use to be "99% less hazardous than smoking." [18]
- Snus: Snus is an oral moist tobacco often used in pouches. It originated in Sweden and has been part of the country's "tobacco culture" for more than a century. Snus has been directly linked to reducing smoking rates in the country. Swedish men, who have the highest rate of smokeless tobacco use in Europe and the lowest smoking rate, "also have the lowest rates of lung cancer and other smoking-related diseases in Europe."[19] Further, a 2020 long-term study of Swedish snus users that were former smokers concluded that over "80% found snus of great importance to succeed with smoking cessation."[20]

As cigarettes remain available, it is imperative that policymakers offer the consumers access to less harmful tobacco products. Policymakers should avoid excessive regulations, unfair taxation, and outright prohibition when enacting policies regarding novel tobacco harm reduction innovations. Lawmakers should put forth policies that both inform consumers of the wide variety of less harmful products, as well as allow the market to introduce products that are effective at both delivering nicotine in a less harmful manner and reducing smoking rates.

References

- 1. Centers for Disease Control and Prevention, "Current Cigarette Smoking Among Adults in the United States," Smoking & Tobacco Use, March 17, 2022,
- 2. Office of the Associate Director for Policy and Strategy, "Health Topics Tobacco," Centers for Disease Control and Prevention, September 30, 2021,
- 3.M. A. H. Russell, "Low-tar medium-nicotine cigarettes: a new approach to safer smoking," British Medical Journal, June 12, 1976, https://www.bmj.com/content/bmj/1/6023/1430.full.pdf.
 4. National Cancer Institute, "Harms of Cigarette Smoking and Health Benefits of Quitting," December 19, 2017, https://www.cancer.gov/about-cancer/causes-prevention/risk/tobacco/cessation.
- 5. U.S. Food and Drug Administration, "Nicotine Is Why Tobacco Products Are Addictive," June 29, 2022, https://www.fda.gov/tobacco-products/health-effects-tobacco-use/nicotine-why-tobacco-
- 6. Centers for Disease Control and Prevention, "Quit smoking medicines are much safer than smoking," Tips From Former Smokers ®, January 7, 2022,
- https://www.edc.gov/tobacco/canpaign/tips/quit-smoking/quit-smoking/medications/3-reasons-to-use-medicines-when-you-quit/quit-medicines-are-safer-than-smoking/index.html.

 7. American Cancer Society, "Health Risks of Smokeless Tobacco," October 28, 2020, https://www.cancer.org/healthy/stay-away-from-tobacco/health-risks-of-tobacco/smokeless-tobacco.html.

 8. A. McNeill et al., "E-cigarettes: an evidence update," Public Health England, August 2015, https://www.cancer.org/healthy/stay-away-from-tobacco/health-risks-of-tobacco/smokeless-tobacco.html.

 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/statchment_data/file/733022/Ecigarettes_an_evidence_update_A_report_commissioned_by_Public_Health_England. data/file/733022/Ecigarettes an evidence update A report commissioned by Public Health England F
- 9. Ann McNeill et al., "Vaping in England, an evidence update including vaping for smoking cessation," February 2021,

 https://wssets.publishing.service.gov.uk/governmen/uploads/system/uploads/attachment_data/file/962221/Vaping_in_England_evidence_update_February_2021.pdf.

 10. Royal College of Physicians, "Nicotine without smoke: Tobacco harm reduction," April 28, 2016, https://www.replondon.ac.uk/projects/outputs/nicotine-without-smoke-tobacco-harm-reduction.

 11. Nicholas Bakalar, "From 0 to 10 Million: Vaping Takes Off in the U.S.," The New York Times, August 31, 2018, https://www.nytimes.com/2018/08/31/health/vaping-cigarettes-nicotine.html.

 12. U.S. Food and Drug Administration. "FDA Permits Marketing of E-Cigarettes-products, Marking First Authorization of 18 Kind by the Agency," FDA News Release, October 12, 2021, https://www.fda.gov/news-eyents/oress-announcements/fides-permits-marketing-egigarettes-products-marking-first-authorization-in-skind-awardy.

- 13 [1] U.S. Food and Drug Administration, "FDA Authorizes Marketing of IQOS Tobacco Heating System with 'Reduced Exposure' Information," FDA News Release, July 7, 2020,
- https://www.fda.gov/news-events/press-announcements/fda-authorizes-marketing-iqos-tobacco-heating-system-reduced-exposure-information.

 14. [1] Michael Stoklosa et al., "Effect of IQOS introduction on cigarette sales: evidence of decline and replacement," Tobacco Control, July 29, 2020, https://pubmed.ncbi.nlm.nih.gov/31209129/.

 15. [1] Paul R. Nelson et al., "Randomized Trial to Compare Smoking Cessation Rates of Snus, With and Without Smokeless Tobacco Health-Related Information, and a Nicotine Lozenge," Nicotine & Tobacco Research, January 24, 2018, https://academic.oup.com/ntr/article/21/1/88/48/23099.

 16. [1] Peter Hajek et al., "A Randomized Trial of E-Cigarettes versus Nicotine-Replacement Therapy," The New England Journal of Medicine, February 14, 2019, https://www.neim.org/doi/ful/10/10/5/neimona/80879
- 17.[1] Brad Rodu, "New Study Documents the Health Effects from Snus Use: Almost Zero," Tobacco Truth, January 19, 2011, https://rodutobaccotruth.blogspot.com/2011/01/new-study-documents-
- 18.[1] Brad Rodu et al., "Vaping, E-Cigarettes, and Public Policy Toward Alternatives to Smoking," The Heartland Institute, February 20, 2017, https://www.heartland.org/publications-
- 19. [1] Brad Rodu, "Smoking in the European Union: How Swede It Could Be," Tobacco Truth, August 3, 2009, https://rodutobaccotruth.blogspot.com/2009/08/smoking-in-european-union-how-
- 20.[1] Tove Sohlberg and Peter Wennberg, "Snus cessation patterns a long-term follow-up of snus users in Sweden," Harm Reduction Journal, September 10, 2020,



The Role of Flavors

A vitally important aspect of vaping is that, in addition to having a fraction of the risk of smoking combustible tobacco, the act of vaping is more pleasing for adults. Flavors are essential to help transition adults away from smoking and help them remain smoke-free.

Flavors are appealing to adults in a wide variety of consumer goods, and it is no different with vaping. Importantly, flavored vapes create a disassociation between smoking and vaping which is instrumental in preventing relapse for former smokers who found it difficult to quit by other means. While some vapers stick to a tobacco flavor, the vast majority do not.

A wide choice of devices, nicotine strengths, and flavored liquids are integral to the success of vaping as an alternative to smoking because it enables individuals to tailor the vaping experience to suit their particular needs.

Flavors are also important in distinguishing combustible tobacco from vaping. There is no comparison between an attractive fruit flavor and the flavor of burned tobacco. Vaping is effectively a means of denormalizing tobacco and normalizing the use of a far safer alternative.

Research

A 2018 survey of nearly 70,000 American adult vapers "found flavors play a vital role in the use of electronic cigarettes and vaping devices."[i] In fact, 83.2 percent and 72.3 percent of survey respondents reported vaping fruit and dessert flavors, respectively. Most respondents indicated restricting flavors would make vaping "less enjoyable."

Analysis of EcigIntelligence's 2019 user survey found that fruits, sweets and candy, and desserts and bakery flavors "are among the most preferred flavors across all age groups."[ii] Use of tobacco flavor was preferred by less than 5 percent of those who vape. In the event that legal sales were restricted to tobacco flavor only, 69 percent of respondents said they would try to acquire their flavors from alternative methods and 25 percent stated that they would be willing to drive over 100 miles to obtain supply. This illustrates that flavors are important to the appeal of vaping over smoking and that proposals to ban flavored vaping products are more an attempt at prohibition by stealth than a serious public health measure.

A 2020 study found an association between flavors and smoking cessation. In a cohort study of more than 17,900 participants, the authors found that "adults who began vaping nontobacco-flavored ecigarettes were more likely to quit smoking than those who vaped tobacco flavors."[iii]



Restricting Vape Flavors Perpetuates Smoking

Many lawmakers are being convinced into proposing a ban on vape flavors in the mistaken belief that they are the only driver of youth vaping. It seems to have been forgotten that youth experimentation with much more harmful combustible tobacco was at very high levels in the past when there was only tobacco flavor to offer.

Since vaping is a substitute for smoking in those who want to use nicotine, restricting vaping increases the appeal of combustible tobacco.

A July, 2021 survey in Nicotine & Tobacco Research found that one-third (33.2 percent) of survey respondents would "likely switch to [combustible] cigarettes" if flavors were banned in e-cigarettes. [i]

More alarmingly, a 2021 Yale University study found that "San Francisco's ban on flavored tobacco product sales was associated with increased smoking among minor high school students" and that "reducing access to flavored electronic nicotine delivery systems may motivate youths who would otherwise vape to substitute smoking."[ii] Further, there is a correlation between state flavored ecigarette bans and increases in young adult smoking rates.[iii]

This should not come as a surprise because of the substitution effect of competing nicotine delivery products. Nicotine use has been prevalent for many hundreds of years, restricting less harmful nicotine-containing products effectively protects sales of harmful, combustible cigarettes.

A variety of vape flavors are beneficial to public health for several reasons:

- They provide intense competition for the cigarette trade by presenting an attraction that combustible tobacco cannot match.
- Flavors provide a more appealing alternative to smoking and lead to population level reduced harm from nicotine use if uptake and initiation of vaping instead of smoking is widespread.
- Most people who smoke do so as a result of peer pressure, whether as adolescents or adults.
- Flavors help more people to enjoy vaping instead of smoking and therefore optimize the chance that future nicotine users will be more likely to initiate with a vape than with a combustible cigarette.

Lawmakers should recognize the crucial role that flavors play in reducing combustible tobacco use and put forth policies that inform consumers of the wide variety of less harmful products on the market.

References

[1] Konstantinos Farsalinos, "Submitting to the FDA the findings of the largest ever survey on e-cigarette flavors use by US vapers," E-Cigarette Research, August 11, 2008, http://www.ecigarette-research.org/research/index.php/whats-new/2018-2/266-us-flav.

[2] Consumer Advocates for Smoke-free Alternatives Association, "ECigintelligence User Survey 2019," August 25, 2020, https://casaa.org/ecigintelligence-user-survey-

[3] Abigail S. Friedman and SiQing Xu, "Associations of Flavored e-Cigarette Uptake With Subsequent Smoking Initiation and Cessation," JAMA, June 5, 2020, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7275248/.

[4] Heather Posner et al., "Reactions to Sales Restrictions on Flavored Vape Products or All Vape Products Among Young Adults in the United States," Nicotine & Tobacco Research, March 2022, https://academic.oup.com/ntr/advance-article-abstract/doi/10_1093/ntr/ntab154/6332852?redirectedFrom=fulltext.

[5] Abigail S. Friedman, "A Difference-in-Differences Analysis of Youth Smoking and a Ban on Sales of Flavored Tobacco Products in San Francisco, California," JAMA Pediatrics, May 24, 2021, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8145156/.
 [6] Lindsey Stroud, "Statewide Flavored E-Cigarette Bans Have Led to Increases in Young Adult Smoking," Townhall, October 21, 2022,

[6] Lindsey Stroud, "Statewide Flavored E-Cigarette Bans Have Led to Increases in Young Adult Smoking," Townhall, October 21, 2022 https://townhall.com/columnists/lindseystroud/2022/10/20/statewide-flavored-e-cigarette-bans-have-led-to-increases-in-young-adult-smoking-n2614807



Flavors Are Not Main Reason for Youth E-Cigarette Use

In 2019, many lawmakers sought to address the increase in youth e-cigarette use by enacting various policy proposals, including banning non-tobacco flavors in e-cigarette products. According to e-cigarette opponents, flavors are designed to only attract youth and have no value in tobacco harm reduction.

While addressing youth use of any age-restricted product is laudable, numerous state and national surveys indicate that flavors are not the most commonly cited reason for e-cigarette use among youth. Rather than enacting draconian bans, lawmakers should focus on the underlying reasons for youth e-cigarette use.

State Survey Data

The Centers for Disease Control and Prevention (CDC) conducts the Youth Risk Behavior Survey (YRBS) which examines various youth data points, including tobacco and vaping use. While data is limited, some states have sought to examine why youth are using e-cigarettes.

In 2019 in aggregate analysis of four state surveys (Connecticut[i], Montana[ii], Rhode Island[iii], and Virginia[iv]), among all high school students, 59.6 percent reported having never used an ecigarette. Of the remaining students, 18 percent cited using e-cigarettes for "some other reason," 12.1 percent reported using them because a family member and/or friend had, and only 5.2 percent reported using e-cigarettes because they were "available in flavors."

In one 2019 state survey (Vermont) of high school students that were current e-cigarette users, 51 percent reported using e-cigarettes for some "other reason," 17 percent had used them because family and/or friends, and only 10 percent reported current e-cigarette use because of flavors.[v]

National Survey Data

The Centers for Disease Control and Prevention annually conducts the National Youth Tobacco Survey (NYTS), which measures "tobacco-related behaviors, attitudes, beliefs, and exposure to proand anti-tobacco influences."[vi] Since 2016, the NYTS has examined why youth have tried and/or are using e-cigarettes.

In 2016, among middle and high school students that had ever used an e-cigarette, 39 percent reported using them because a "friend or family member used them," 31 percent cited "other," and 31 percent reported using them because they "are available in flavors such as mint, candy, fruit, or chocolate." [vii]

In 2019, among middle school and high school students that were current e-cigarette users, 55.3 percent reported vaping because they were "curious about them," 30.8 percent cited using them because a "friend or family member used them," and only 22.4 percent cited using e-cigarettes because of flavors.[viii]

The NYTS went further in 2021 and offered additional reasons for e-cigarette use than prior surveys. [ix] The results are interesting and indicative of a different trend in youth substance youth, including issues of anxiety and/or depression.



For example, in 2021, among middle and high school students that were current e-cigarette users, 43.4 percent reported using them because they were "feeling anxious, stressed, or depressed," 42.8 percent had used e-cigarettes to get a "buzz from nicotine," 28.3 percent had used them because a friend had used them, and only 13.2 percent reported using e-cigarettes because of flavors.

Among middle and high school students that had ever used e-cigarettes, 57.8 percent reported trying them because of a friend, 47.6 percent cited curiosity as a reason for use, 25.1 percent reported trying them because they were "feeling anxious, stressed, or depressed," 23.3 percent had tried them to get a "buzz from nicotine," and only 13.5 percent had reported trying e-cigarettes because they are available in "flavors, such as menthol, candy, fruit, or chocolate."

As policymakers seek to reduce youth use of age-restricted products, it is imperative that they understand the reasons why youth are using such products, including e-cigarettes. State and national data indicate that flavors is often cited as the third reason for youth e-cigarette use, and other factors are contributing to their use that will not be impacted by misguided policies such as flavor bans.

References

- 1.[1] Connecticut High School Survey, "2019 Youth Risk Behavior Survey Results," 2019,
- https://portal.ct.gov/-/media/Departments-and-Agencies/DPH/CSHS/2019CT Codebook.pdf.

 2. [1] Montana Office of Public Instruction, "2019 Montana Youth Risk Behavior Survey, High School Results," 2019, https://opin.tgov/Portals/182/Page%20Files/YRBS/2019YRBS/2019 MT YRBS FullReport.pdf?ver=2019-08-23-
- 3. [1] Rhode Island High School Survey, "2019 Youth Risk Behavior Survey Results," 2019, https://health.ri.gov/materialbyothers/yrbs/2019HighSchoolDetailTables.pdf.
 4. [1] Virginia High School Survey, "2019 Youth Risk Behavior Survey Results," 2019, 11 Virginia High School Survey, "2019 Youth Risk Behavior Survey Results," 2019, 11 Virginia High School Survey, "2019 Youth Risk Behavior Survey Results," 2019, 11 Virginia High School Survey, "2019 Youth Risk Behavior Survey Results," 2019, 12 Virginia High School Survey, "2019 Youth Risk Behavior Survey Results," 2019, 12 Virginia High School Survey, "2019 Youth Risk Behavior Survey Results," 2019, 12 Virginia High School Survey, "2019 Youth Risk Behavior Survey Results," 2019, 12 Virginia High School Survey, "2019 Youth Risk Behavior Survey Results," 2019, 12 Virginia High School Survey, "2019 Youth Risk Behavior Survey Results," 2019, 12 Virginia High School Survey, "2019 Youth Risk Behavior Survey Results," 2019, 12 Virginia High School Survey, "2019 Youth Risk Behavior Survey Results," 2019, 12 Virginia High School Survey, "2019 Youth Risk Behavior Survey Results," 2019, 12 Virginia High School Survey, "2019 Youth Risk Behavior Survey Results," 2019, 12 Virginia High School Survey, "2019 Youth Risk Behavior Survey Results," 2019,
- https://www.vdh.virginia.gov/content/uploads/sites/69/2020/06/2019VAH-Detail-Tables.pdf
- 5.[1] 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.
- 6.[1] Office of Disease Prevention and Health Promotion, "National Youth Tobacco Survey, https://health.gov/healthypeople/objectives-and-data/data-sources-and-methods/data-sources/national-youth-tobacco-survey-
- 7.[1] James Tsai et al., "Reasons for Electronic Cigarette Use Among Middle and High School Students
 8.— National Youth Tobacco Survey, United States, 2016," Morbidity and Mortality Weekly Report, Centers for Disease Control and Prevention, February 16, 2018, https://www.cdc.gov/mmwr/volumes/67/wr/mm6706a5.htm? cid=mm6706a5 w.
- S. CId=mm6/U6a5 w.
 9. [1] Teresa W. Wang et al., "Tobacco Product Use and Associated Factors Among Middle and High School Students United States, 2019," Morbidity and Mortality Weekly Report, Centers for Disease Control and Prevention, December 6, 2019, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6903396/pdf/ss6812a1.pdf.
 10. [1] Andrea S. Gentzke et al., "Tobacco Product Use and Associated Factors Among Middle and High School Students National Youth Tobacco Survey, United States, 2021," Morbidity and Mortality Weekly Report, Centers for Disease Control and Prevention, March 11, 2022, https://www.cdc.gov/mmwr/volumes/71/ss/pdfs/ss7105a1-H.pdf.



Tobacco Harm Reduction Products Can Help Adults Quit Smoking

Many opponents of tobacco harm reduction (THR) often claim there is no evidence that alternative nicotine/novel tobacco products including e-cigarettes, heated tobacco, and smokeless and snus tobacco products, are effective for smoking cessation. This misinformation deters many people who smoke from trying a reduced risk product.

Users Tend to Be Current and/or Former Smokers

Surveys in individual countries indicate an overwhelming majority of novel tobacco product users are current and former smokers. For example, the UK's Action on Smoking and Health (ASH) estimate that less than one percent of the country's current 3.6 million vapers are never-smokers.[1] A 2019 study in the *International Journal of Environmental Research and Public Health* found that among heated tobacco users in Japan, only one percent were never smokers.[2] Similarly, according to the Centers for Disease Control and Prevention (CDC), in 2018, current and ever e-cigarette use was highest among persons who had quit smoking and "lowest among those who never smoked cigarettes."[3]

Safer nicotine products are almost exclusively attractive to people who smoke and the motivation for trying them is to reduce harm from tobacco or quit entirely. According to the latest Global State of Tobacco Harm Reduction briefing, harm reduction options are already being used by an estimated 112 million people worldwide, with approximately 82 million using vaping products, 20 million using heated tobacco and 10 million using smokeless tobacco, nicotine pouches and snus.[4]

Research Indicates Effectiveness of Tobacco Harm Reduction Products

Data from national surveys find e-cigarettes to be effective in helping adults quit smoking.

In the UK it has been estimated by ASH that at least 2.3 million UK smokers have quit smoking completely with nicotine vaping devices.[5] According to the CDC, in the United States, 4.3 million US adult nicotine vapers are ex-smokers,[6] and the latest Eurobarometer survey found that 7.5 million EU citizens have quit smoking using a nicotine vaping product.[7]

Heated tobacco products have led to significant reduction in smoking rates. A 2020 study by the American Cancer Society remarked that heated tobacco products "likely reduced cigarette sales in Japan."[8] Another 2020 study published in the *International Journal of Environmental Research and Public Health* came to a similar conclusion, stating that "the accelerated decline in cigarette-only sales since 2016 corresponds to the introduction and growth in the sales of heated tobacco products."[9]

Snus has been directly linked to reducing smoking rates in Sweden, which has a seven percent smoking rate, the lowest in Europe. A 2020 long-term study of Swedish snus users that were former smokers concluded that more than "80% found snus of great importance to succeed with smoking cessation." [10] Furthermore, a joint Swedish and Australian study of more than 60,000 individuals found that "Snus has both contributed to decreasing initiation of smoking and ... appears to facilitate smoking cessation." [11]

A 2008 study in Harm Reduction Journal examining data from the 2000 National Health Interview Survey, found that men who had switched to smokeless tobacco in their most recent quit attempt "had the highest proportion of success among those attempting [to quit] smoking," and that switching to smokeless tobacco "compares very favorably with pharmaceutical nicotine as a quit-smoking aid among American men." [12]

Nicotine pouches are a more novel tobacco harm reduction product with research indicating that they can be useful in helping adults quit smoking. A May 2022 study assessed that if nicotine pouches had hypothetically been introduced into the US in 2000, there would have been about 700,000 fewer deaths by 2050.[13]



FDA-Approved Cessation Products Have Limited Success

Unfortunately for many adults who continue to smoke, current FDA-approved cessation products have not been useful helping them quit, and some studies indicate novel tobacco harm reduction products are more effective.

A 2019 randomized trial published in The New England Journal of Medicine found e-cigarettes to be twice as effective as nicotine replacement therapy in helping adults quit smoking.[14] In 2021, the Cochrane Library living review of e-cigarettes found that "nicotine e-cigarettes help more people to stop smoking than nicotine replacement therapy."[15]

Unfortunately, as of June 2022, the FDA erroneously claims that "there is not yet enough evidence to support claims that e-cigarettes... are effective tools for quitting smoking."[16]

References

- 1. Action on Smoking and Health, "Use of e-cigarettes (vapes) among adults in Great Britain," June, 2021, <u> https://ash.org.uk/uploads/Use-of-e-cigarettes-vapes-among-adults-in-Great-Britain-2021.p</u>
- 2. Edward Sutanto et al., "Prevalence, Use Behaviors, and Preferences among Users of Heated Tobacco Products: Findings 2. Edward Sutanto et al., "Prevalence, Use Benaviors, and Preferences among Users of Heated Topacco Products: Findings from the 2018 ITC Japan Survey," International Journal of Environmental Research and Public Health, November 21, 2019, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6926809/# ffn sectitle

 3. Maria A. Villarroel et. al, "Electronic Cigarette Use Among U.S. Adults, 2018," National Center for Health Statistics Data Brief, Centers for Disease Control and Prevention, April, 2020, https://www.cdc.gov/nchs/products/databriefs/db365.htm

 4. Global State of Tobacco Harm Reduction, "82 million vapers worldwide in 2021: the GSTHR estimate," Knowledge Action Change, February, 2022, https://gsthr.org/briefing-papers/82-million-vapers-worldwide-in-2021-the-gsthr-estimate/

- 5. Action on Smoking and Health, supra note 1.
 6. Monica E. Cornelius et al., "Tobacco Product Use Among Adults United States, 2019," Morbidity and Mortality Weekly Report, Centers for Disease Control and Prevention, November 20, 2020,
- https://www.cdc.gov/mmwr/volumes/69/wr/mm6946a4.htm?s cid=mm6946a4 w
 7. European Commission, "Attitudes of Europeans towards tobacco and electronic cigarettes," Eurobarometer, May, 2017, https://europa.eu/eurobarometer/surveys/detail/2146
- 8. Michael Stoklosa et al., "Effect of IQOS introduction on cigarette sales: evidence of decline and replacement," Tobacco Control, June 17, 2019, https://pubmed.ncbi.nlm.nih.gov/31209129/
 9. K. Michael Cummings et al., "What Is Accounting for the Rapid Decline in Cigarette Sales in Japan?," International Journal
- of Environmental Research and Public Health, May 17, 2020,
- https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7277739/# ffn sectitle

 10. Tove Sohlberg and Peter Wennberg, "Snus cessation patterns a long-term follow-up of snus users in Sweden," Harm Reduction Journal, September 10, 2020, https://harmreductionjournal.biomedcentral.com/articles/10.1186/s12954-020-
- 11. Lars Ramström et al., "Patterns of Smoking and Snus Use in Sweden: Implications for Public Health," International Journal
- of Environmental Research and Public Health, November 9, 2016, https://www.mdpi.com/1660-4601/13/11/1110
 12. Brad Rodu and Carl V Phillips, "Switching to smokeless tobacco as a smoking cessation method: evidence from the 2000 National Health Interview Survey," Harm Reduction Journal, May 23, 2008,
- https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2427022/# ffn sectitle

 13. Peter N. Lee et al., "Estimating the public health impact had tobacco-free nicotine pouches been introduced into the US in 2000," BMC Public Health, May 21, 2022, https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-022-13441-
- 14. Peter Hajek et al., "A Randomized Trial of E-Cigarettes versus Nicotine-Replacement Therapy," The New England Journal of Medicine, February 14, 2019, https://www.nejm.org/doi/full/10.1056/nejmoa1808779
 15. J. Hartmann-Boyce et al., "Can electronic cigarettes help people stop smoking, and do they have any unwanted effects when used for this purpose?," Cochrane Review, September 14, 2021, https://www.cochrane.org/CD010216/TOBACCO can-electronic-cigarettes-help-people-stop-smoking-and-do-they-have-any-unwanted-effects-when-used
 16. U.S. Food and Drug Administration, "E-Cigarettes, Vapes, and other Electronic Nicotine Delivery Systems (ENDS)," June 20, 2022, <a href="https://www.fda.gov/tobacco.preducts-ingredients-components/a-cigarettes-vapes-and-other-placetronic-cigarettes-vapes-and-other-placetronic-cigarettes-vapes-and-other-placetronic-cigarettes-vapes-and-other-placetronic-cigarettes-vapes-and-other-placetronic-cigarettes-vapes-and-other-placetronic-cigarettes-vapes-and-other-placetronic-cigarettes-vapes-and-other-placetronic-cigarettes-vapes-and-other-placetronic-cigarettes-vapes-and-other-placetronic-cigarettes-vapes-and-other-placetronic-cigarettes-vapes-and-other-placetronic-cigarettes-vapes-and-other-placetronic-cigarettes-vapes-and-other-placetronic-cigarettes-placetro
- 29, 2022, https://www.fda.gov/tobacco-products/products-ingredients-components/e-cigarettes-vapes-and-other-electronicnicotine-delivery-systems-ends Accessed October 7, 2022.

