

Cigarette Taxes and Cigarette Smuggling by State, 2021

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December 2023

Key Findings:

- Excessive tax rates on cigarettes induce substantial black and gray market movement of tobacco products into high-tax states from low-tax states or foreign sources.
- New York has the highest inbound smuggling activity, with an estimated 54.5 percent of cigarettes consumed in the state deriving from smuggled sources in 2021. New York is followed by California (44.0 percent), New Mexico (38.3 percent), Massachusetts (37.6 percent), and Washington (37.3 percent).
- Wyoming has the highest level of net outbound smuggling at 52.3 percent of consumption. The next highest levels of outbound smuggling are in Delaware (38.7 percent), Virginia (34.5 percent), New Hampshire (34.1 percent), and Idaho (31.6 percent).
- Colorado, Maryland, and Oregon significantly increased their cigarette tax rates from 2020 to 2021. All three states saw major increases in cigarette smuggling.
- The annual forgone revenue from untaxed cigarette packs in states that experience net inbound smuggling exceeded \$5.2 billion in 2021.
- Flavor bans have been imposed in Massachusetts and California. Following the imposition of a flavor ban, smuggling skyrocketed.
- Policymakers interested in increasing tax rates should recognize the unintended consequences of high taxation rates. Criminal distribution networks are well-established and illicit trade will grow as tax rates rise.

Tobacco Tax Differentials Incentivize Smuggling

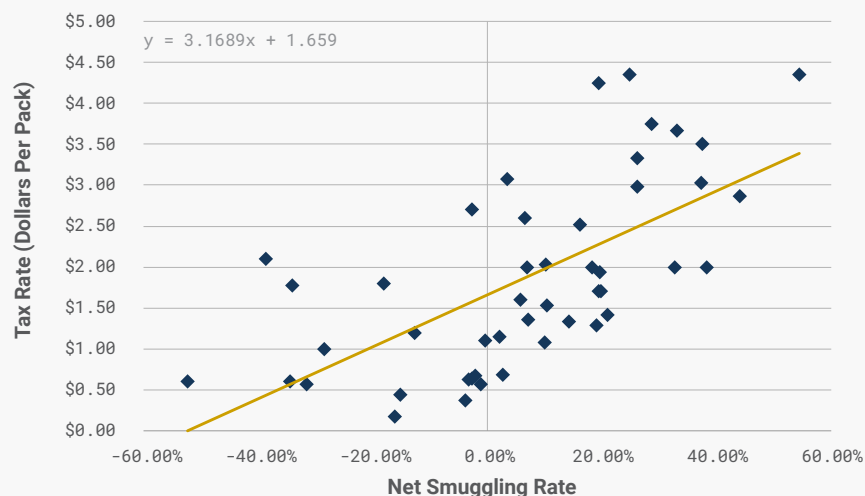
Higher tax rates lead to more smuggling because people respond to incentives. As tax rates increase, consumers and suppliers search for ways around these costs. In cigarette markets, consumers tend to shop across borders where the tax rates are lower and dealers develop black and gray markets to sell illegally to consumers, paying little or no tax at all. Growing cigarette tax differentials have made cigarette smuggling both a national problem and a lucrative criminal enterprise.

Each year, in partnership with scholars at the Mackinac Center for Public Policy, we estimate cigarette smuggling rates for each U.S. state and the District of Columbia.¹ The most recent report uses 2021 data and finds a strong positive relationship between cigarette smuggling and tax rates across the country. The data also demonstrate that when states increase their cigarette taxes, smuggling rates increase, both in the form of increased purchases in neighboring states and through illicit international channels.

Figure 1.

Cigarette Smuggling Increases as Excise Tax Rates Increase

Cigarette Smuggling and Cigarette Excise Tax Rates, 2021



Source: Mackinac Center for Public Policy; Tax Foundation.

Nationwide, New York continues to have the greatest rate of cigarette smuggling, with smuggled cigarettes accounting for 54.5 percent of total cigarette consumption in the state. New York also has one of the highest state cigarette taxes (\$4.35 per pack), not counting the additional local New York City cigarette tax (\$1.50 per pack) and a minimum price markup.

The inbound flow of cigarettes not appropriately taxed by New York costs the state roughly \$1.1 billion each year in lost revenue. And the state needs to use resources to address its black-market problems. In 2020, following a long-term investigation into an individual's cigarette smuggling activity, a process including court-authorized search warrants, wiretaps, grand jury subpoenas, and other investigative tools, New York seized more than \$1.3 million in cash and 6,267 cartons of untaxed cigarettes, according to a press

¹ Michael Lafaive and Todd Nesbit, "Cigarette Taxes & Smuggling," Mackinac Center for Public Policy, June 2023, <https://www.mackinac.org/smokes>.

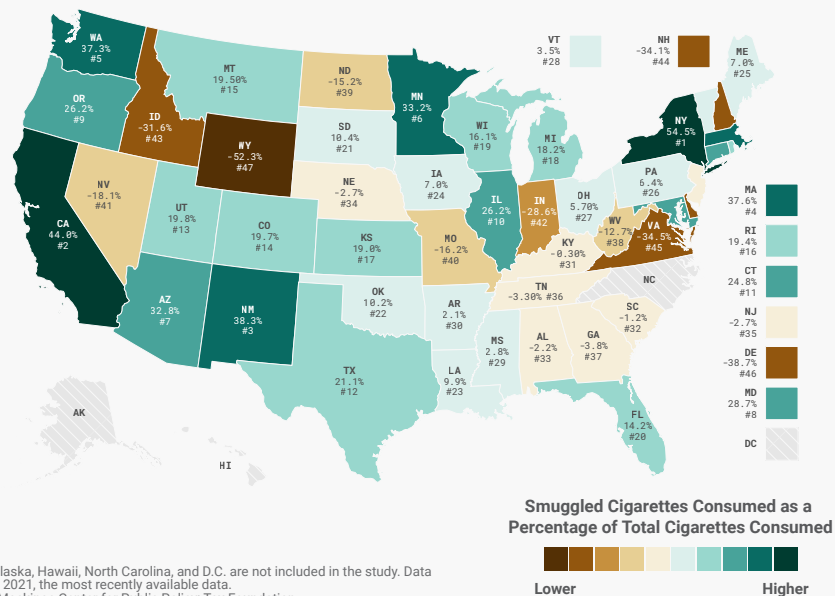
release from the Queens’ District Attorney.² A 2023 raid seized more than 1,800 cartons of cigarettes and \$155,000 in cash.³ But even when successful, policing smuggling is costly and only prohibits a drop of water in the East River of smuggling activity. The 2023 seizure of 18,000 cigarette packs represents 0.007 percent of estimated annual smuggling activity in the state.

States and municipalities have spent millions to combat cigarette smuggling. Recent policy responses include greater law enforcement activity on interstate roads,⁴ differential tax rates near low-tax jurisdictions,⁵ banning common carrier delivery of cigarettes,⁶ and cracking down on tribal reservations that sell tax-free cigarettes.⁷ However, the underlying problem persists. High cigarette taxes act similarly to a “price prohibition” on the legal product in many U.S. states, incentivizing smuggling and illicit activity.⁸

Figure 2.

Cigarette Smuggling by State

Smuggled Cigarettes Consumed as a Percentage of Total Cigarettes Consumed, 2021



After New York, the highest rate of smuggling occurs in California (44.0 percent of consumption smuggled), New Mexico (38.3 percent), Massachusetts (37.6 percent), and Washington (37.3 percent). Of the states for which the authors had data, the highest rates of outbound smuggling (least amount of net inbound smuggling) occur in Wyoming (52.3 percent outbound smuggling), Delaware (38.7 percent), Virginia (34.5 percent), and New Hampshire (34.1 percent).

2 “Cigarette Smuggler Pays More Than \$1.3 Million to New York State After Pleading Guilty to Grand Larceny,” Office of Queens District Attorney Melinda Katz, Oct. 7, 2020, <https://queensda.org/cigarette-smuggler-pays-more-than-1-3-million-to-new-york-state-after-pleading-guilty-to-grand-larceny/>.

3 “Five Arrested in Major Contraband Cigarette and Cigar Trafficking Case,” New York State Department of Taxation and Finance, Apr. 27, 2023, <https://www.tax.ny.gov/press/rel/2023/counterfeitstampig042723.htm>.

4 Gary Fields, “States Go to War on Cigarette Smuggling,” *The Wall Street Journal*, Jul. 20, 2009, <http://www.wsj.com/articles/SB124804682785163691>.

5 Mark Robyn, “Border Zone Cigarette Taxation: Arkansas’s Novel Solution to the Border Shopping Problem,” Tax Foundation, Apr. 9, 2009, <http://taxfoundation.org/article/border-zone-cigarette-taxation-arkansas-novel-solution-border-shopping-problem>.

6 Curtis S. Dubai, “UPS Decision Unlikely to Stop Cigarette Smuggling,” Tax Foundation, Oct. 25, 2005, <https://taxfoundation.org/ups-decision-unlikely-stop-cigarette-smuggling/>.

7 Joseph Bishop-Henchman, “New York Governor Signs Law to Tax Cigarettes Sold on Tribal Lands,” Tax Foundation, Dec. 16, 2008, <http://taxfoundation.org/blog/new-york-governor-signs-law-tax-cigarettes-sold-tribal-lands>.

8 Michael LaFaive, “Prohibition by price: Cigarette taxes and unintended consequences,” In *For Your Own Good: Taxes, Paternalism, and Fiscal Discrimination in the Twenty-First Century*, edited by Adam Hoffer and Todd Nesbit (2018).

The biggest increase in smuggling from 2020-2021 came in Maryland. The state increased its cigarette tax rate by \$1.75 per pack, effective March 1, 2021. The new tax rate of \$3.75 per pack gave Maryland the fourth-highest tax rate in the country.

Net cigarette smuggling in Maryland increased by nearly 29 percentage points in 2021. Prior to the tax increase, Maryland was a neutral state for smuggling, with about as many packs leaving the state as coming in. After the tax increase, Maryland had a 28.7 percent net inbound smuggling rate, the eighth-highest smuggling rate in the country and a 22-rank increase from 2020. Overall, Maryland now misses out on more than \$219 million in cigarette taxes due to smuggling.

Maryland's neighbors—Delaware, Pennsylvania, Virginia, and West Virginia—all saw an increase in outbound smuggling. Table 1 shows that outbound smuggling increased by 26.4 percentage points in Delaware, roughly \$19 million worth of revenue for the First State, moving Delaware down six spots in the ranking of states by net inbound smuggling. Pennsylvania saw the largest volume of increase in outbound smuggling of Maryland's neighbors, adding more than \$80 million in tax revenue for the Keystone State.

Table 1. Changes in Smuggling Rates and Revenues for States That Increased Cigarette Tax Rates and Their Neighboring States

	Smuggling Rate Change	Rank Change	Smuggling Effect Revenue Change
Colorado	11.7%	8	-\$63,211,729
Arizona	-0.7%	-1	\$8,463,785
Kansas	-1.2%	-3	\$3,117,014
Nebraska	-2.0%	-2	\$928,637
New Mexico	-5.1%	0	\$12,840,697
Oklahoma	-2.1%	-3	\$10,107,913
Utah	-1.5%	-1	\$3,286,819
Wyoming	-28.0%	-4	\$2,506,770
Maryland	28.7%	22	-\$219,311,525
Delaware	-26.4%	-6	\$18,997,199
Pennsylvania	-5.6%	-6	\$80,552,616
Virginia	-6.9%	0	\$30,693,266
West Virginia	-7.2%	0	\$9,506,540
Oregon	22.9%	17	-\$141,911,334
California	-0.8%	0	\$55,982,957
Idaho	-5.8%	1	\$1,267,812
Nevada	-7.6%	-2	\$9,082,616
Washington	-4.3%	-1	\$39,755,634

Source: Mackinac Center for Public Policy; Tax Foundation.

Colorado and Oregon also had sizable cigarette tax rate increases in 2021. Colorado increased its tax rate by \$1.10 per pack to \$1.94, and Oregon increased its cigarette tax rate by \$2.00 per pack to \$3.33. Both states saw substantial increases in smuggling. Smuggling in Colorado increased by 11.7 percentage points, losing the state an additional \$63 million in revenue each year. Smuggling in Oregon increased 22.9 percent, losing nearly \$142 million in revenue for the state each year.

States neighboring Colorado or Oregon were the beneficiaries of increased outbound smuggling. The substantial 28-percentage-point increase in outbound smuggling in Wyoming made the Cowboy State the nation's leader in the percentage of outbound smuggling. Nevada saw the greatest percentage increase in outbound smuggling of Oregon's neighbors, though most of the change in smuggling volume came from California and Washington.

A sizable literature of peer-reviewed academic studies supports these observations.⁹ A 2017 study published in *Public Finance Review* provides the academic theory and estimates for how tax rates affect smuggling, highlighting that easily transportable goods (e.g., cigarettes) will be attractive cross-border shopping items.¹⁰ A 2018 study published in the same journal supported those findings by examining littered packs of cigarettes across 132 communities in 38 states, finding that 21 percent of packs did not have proper local stamps.¹¹

Smuggling comes in different forms. "Casual" smuggling occurs when smaller quantities of cigarettes are purchased in one area and then transported for personal consumption. "Commercial" smuggling is a large-scale criminal activity that can involve counterfeit state tax stamps, counterfeit versions of legitimate brands, and moving prohibited products.¹² The Mackinac Center provides several anecdotes of smuggling activity over the many editions of its report, including a prison guard caught smuggling cigarettes into prisons, a Maryland police officer running illicit cigarettes while on duty, and a Virginia man hiring a contract killer over a cigarette smuggling dispute.¹³

International Smuggling and Counterfeiting Hurt Americans

Smuggling that occurs within the borders of the United States is mostly a zero-sum activity from a cost perspective. Smugglers may even facilitate an increase in total economic activity by decreasing the market tax burden, albeit at a high social cost.

A smuggler who legally purchases cigarettes in a low-tax area, such as Missouri, and then sells the cigarettes in a high-tax area, like California, still pays tax and buys American-produced goods. The tax gain for Missouri is less than the tax loss for California and consumption may decrease more slowly due to the lower effective (tax-reduced) price for California smokers, but all the gains from trade stay within the country.

But some criminals avoid the legal market altogether. Rather than pay market prices and lower taxes on American-made cigarettes, certain criminals produce counterfeit cigarettes with the look and feel of legitimate American brands and sell them with counterfeit tax stamps, paying no tax whatsoever. In 2020, three men were arrested in Texas for transporting internationally produced illicit cigarettes. They admitted intentions to smuggle over 400 million cigarettes.¹⁴

9 Michael F. Lovenheim, "How Far to the Border?: The Extent and Impact of Cross-Border Casual Cigarette Smuggling," *National Tax Journal* 61:1 (March 2008), <https://www.ntanet.org/NTJ/61/1/ntj-v61n01p7-33-how-far-border-extent.pdf?v=%CE%B1&r=04833355782549953>; R. Morris Coats, "A Note on Estimating Cross-Border Effects of State Cigarette Taxes," *National Tax Journal* 48:4 (December 1995): 573-584, <https://www.ntanet.org/NTJ/48/4/ntj-v48n04p573-84-note-estimating-cross-border.pdf?v=%CE%B1&r=35923133871196367>; Mark Stehr, "Cigarette tax avoidance and evasion," *Journal of Health Economics* 24:2 (March 2005): 277-297, <http://www.sciencedirect.com/science/article/pii/S0167629604001225>.

10 Adam J. Hoffer and Donald J. Lacombe, "Excise tax setting in a dynamic space-time framework," *Public Finance Review* 45:5 (2017): 628-646.

11 Shu Wang, David Merriman, and Frank Chaloupka, "Relative Tax Rates, Proximity, and Cigarette Tax Noncompliance: Evidence from a National Sample of Littered Cigarette Packs," *Public Finance Review* 47:2 (March 2019): 276-311.

12 Scott Drenkard, "Tobacco Taxation and Unintended Consequences: U.S. Senate Hearing on Tobacco Taxes Owed, Avoided, and Evaded," Tax Foundation, Jul. 29, 2014, <https://taxfoundation.org/tobacco-taxation-and-unintended-consequences-us-senate-hearing-tobacco-taxes-owed-avoided-and-evaded/>.

13 Michael Lafaive and Todd Nesbit, "Cigarette Taxes & Smuggling," Mackinac Center for Public Policy, June 2022, <https://www.mackinac.org/smokes>

14 St. John Barned-Smith and Gabrielle Banks, "Inside the lucrative smuggling operation that sees millions of Chinese cigarettes pass through Texas," *Houston Chronicle*, Jul. 1, 2021, <https://www.houstonchronicle.com/news/houston-texas/crime/article/china-cigarettes-tobacco-trafficking-tx-16281704.php>.

Many counterfeit cigarettes in the U.S. are smuggled from China.¹⁵ Estimates put Chinese counterfeit production as high as 400 billion cigarettes per year to meet international demand.¹⁶ Because of the enormous volume of product that ships into U.S. ports from China, it may be easier and lower cost to smuggle Chinese cigarettes into California markets through U.S. ports than to try to capitalize on tax arbitrage by transporting products across the continental U.S.

There are real social costs associated with the smuggling of properly manufactured cigarettes, but they pale in comparison to the dangers posed by this counterfeit market. Internationally smuggled and counterfeit cigarettes are dangerous products as they do not live up to the quality control standards imposed on legitimate brand cigarettes. Researchers have found that counterfeit cigarettes can have as much as seven times the lead of authentic brands and close to three times as much thallium, a toxic heavy metal.¹⁷ Other sources report finding insect eggs, dead flies, mold, and human feces in counterfeit cigarettes.¹⁸

During the prohibition of alcohol in the United States during the 1920s, increased enforcement failed to significantly decrease the prevalence of bootlegging because the profit margins were so large and the distribution networks sophisticated. The same is true for today's cigarette smugglers.

Global illicit trade in tobacco is a growing problem, but it's considered low-risk, high-reward. Incentives matter. Billions of dollars are made each year through smuggling. To make matters worse, smuggling operations involve corruption, money laundering, and terrorism.¹⁹ According to the Financial Action Task Force (FATF), "Large-scale organized smuggling likely accounts for the vast majority of cigarettes smuggled globally."²⁰ These operations hurt governments, who lose out on revenue; consumers, because the products often don't adhere to health standards; legal businesses, which cannot compete with illicit products; and the general respect of the law.

Taxes Are Not the Only Policy That Encourages Smuggling

We can learn from cigarette taxes how other policies involving tobacco and nicotine products may affect consumer and producer behavior.

Flavor bans are perhaps the biggest policy issue involving tobacco and nicotine products over the past decade. Last year, the FDA proposed a rule that would prohibit the sale of menthol cigarettes and flavored cigars, and in October 2023, the FDA sent a final set of rules to the White House Office of Management

15 Adam Hoffer, "Taxes and Illicit Trade," Tax Foundation, Aug. 10, 2023. <https://taxfoundation.org/blog/illicit-trade-taxes-counterfeit-cigarettes/#:~:text=July%2025%2C%202023,-,Tax,each%20with%20different%20policy%20implications>.

16 Te-Ping Chen, "China's Marlboro Country," Center for Public Integrity, Jun. 29, 2009, https://reportingproject.net/underground/index.php?option=com_content&view=article&id=9:chinas-marlboro-country&catid=3:stories&Itemid=22.

17 R.S. Pappas et al., "Cadmium, Lead, and Thallium in Smoke Particulate from Counterfeit Cigarettes Compared to Authentic US Brands," *Food and Chemical Toxicology* 45:2 (Aug. 30, 2006): 202-209.

18 International Chamber of Commerce, Commercial Crime Services, "Counterfeit Cigarettes Contain Disturbing Toxic Substances," <https://icc-ccs.org/index.php/360-counterfeit-cigarettes-contain-disturbing-toxic-substances>.

19 Al Qaeda has made millions of dollars selling counterfeit cigarettes. See Francesca Astorri, "EXCLUSIVE: How extremists smuggled \$1 billion in cigarettes to finance terror," AlArabiya News, May 20, 2020, <https://english.alarabiya.net/features/2017/10/14/Smuggling-cigarettes-new-source-of-terror-financing-worth-1bn-in-North-Africa>; DOS, DOJ, DOT, DOHS, DOHHS, "The Global Illicit Trade in Tobacco: A Threat to National Security," December 2015, <https://2009-2017.state.gov/documents/organization/250513.pdf>.

20 The Financial Action Task Force (FATF), "FATF Report: Illicit Tobacco Trade," Jun. 2012, 9, <https://www.fatf-gafi.org/media/fatf/documents/reports/Illicit%20Tobacco%20Trade.pdf>.

and Budget for final review.²¹ If imposed, the decrease in state and federal revenues would be substantial and likely fuel significantly higher levels of cigarette smuggling.²²

The first state to implement a statewide menthol flavor ban was Massachusetts. Its menthol flavor ban took effect in June 2020. In the 12 months following implementation, sales in the Bay State declined by almost 24 percent compared to the 12 months preceding the ban. Through the end of 2021, sales were down more than 25 percent compared to sales from 2019. This decline translates to \$135 million less in cigarette tax revenue for Massachusetts (not including lost revenue from sales tax and smokeless tobacco sales).

Importantly, these sales did not disappear; most of the transactions merely moved to neighboring states or to illicit markets. Throughout most of the U.S. and all the New England states, cigarette sales have constantly declined since the 1960s. It was telling when sales of cigarettes in New Hampshire increased by 22 percent and sales in Rhode Island increased by 18 percent in the 12 months following the Massachusetts menthol ban. Sales in New Hampshire and Rhode Island remain roughly 10 percent higher in 2021 than in 2019 thanks to cross-border Massachusetts shoppers and smugglers.

Smuggling skyrocketed in Massachusetts. In 2019, prior to the flavor ban, Massachusetts had a net inbound smuggling rate of 19.9 percent, the 12th-highest in the country. The nearly 38 million packs smuggled into the state cost the state more than \$133 million per year in forgone revenue.

A full year after the ban in 2021, smuggling in Massachusetts is up to 37.6 percent, the fourth-highest rate in the country. The 64 million packs smuggled into the state now cost the state \$224 million in forgone revenue each year.

California was the second state to ban flavored cigarettes in December 2022. Prior to the ban, menthol cigarettes made up about 24.5 percent of legal sales in the state. In the months after, from December 2022 to September 2023, total tax-paid cigarette sales dropped about 15 percent from the same period the previous year. Unlike Massachusetts, however, sales have not moved across the border to neighboring states.

California is different from Massachusetts in several ways that would make interstate shopping less likely. California shares a land border with Mexico, the bulk of California's population is several hundred miles from a neighboring U.S. state, and California has some of the busiest international ports in the world. The likelihood of international smuggling is substantially greater and more difficult to track.

21 U.S. Food and Drug Administration, "FDA Proposes Rules Prohibiting Menthol Cigarettes and Flavored Cigars to Prevent Youth Initiation, Significantly Reduce Tobacco-Related Disease and Death," Apr. 28, 2022, <https://www.fda.gov/news-events/press-announcements/fda-proposes-rules-prohibiting-menthol-cigarettes-and-flavored-cigars-prevent-youth-initiation>.

22 Ulrik Boesen, "Federal Menthol Cigarette Ban May Cost Governments \$6.6 Billion," Mar. 2, 2022, <https://taxfoundation.org/federal-menthol-cigarette-ban/>; Adam Hoffer, "FDA Ban on Flavored Cigars Could Cost \$836 Million in Annual Excise Tax Revenue," Aug. 17, 2022, <https://taxfoundation.org/fda-ban-flavored-cigars/>; Ulrik Boesen, "Banning Flavored Tobacco Could Have Unintended Consequences," Tax Foundation, Feb. 12, 2020, <https://www.taxfoundation.org/banning-flavored-tobacco-unintended-consequences/>.

To evaluate the consumption choices of Californians after the menthol ban, market research firm WSPM Group conducted a discarded cigarette pack audit.²³ WSPM collected 15,000 discarded cigarette packs from public trash containers across 10 major California cities in May and June of 2023. Details on each pack were then recorded and categorized, including the cigarette brand, whether the pack contained menthol, if the pack originated domestically or abroad, and details on the tax stamp (if any was present).

The data show that Californians are still smoking menthol cigarettes after the ban. Within the sample, 14.1 percent of packs were menthol and another 7.0 percent of the packs included a form of menthol work-around. In total, 21.1 percent of the discarded packs were menthol-style cigarettes. A mere 3-percentage-point drop in menthol market share should immediately raise questions as to whether the menthol ban is having any significant effects on consumption.

Foreign and illicit market share spiked. Non-U.S. packs comprised 27.6 percent of the sample, compared to an estimated foreign market share of only 17 percent previously. These packs were found in high quantities in all cities studied. Over half of these packs, 14.2 percent of the entire sample, were duty-free cigarettes designated for export, but which somehow made their way back into California cities.

In electronic cigarette and vaping markets, the FDA has failed to authorize any flavored products. As the data from cigarettes clearly show, the risk of creating a new black market or fueling an existing one with operators willing and able to supply nicotine products to consumers is significant. In addition to tax evasion—costing states billions in lost tax revenue—black market e-liquid and cigarettes can be extremely unsafe.²⁴

Multiple reports have confirmed nicotine-containing liquid coming into the U.S. from questionable sources.²⁵ In 2019, cases of serious pulmonary diseases prompted the FDA to publish a warning about black market THC-containing liquid (the psychoactive compound in marijuana).²⁶ Reports of illicit products containing dangerous chemicals resulting in serious medical conditions also arose in 2019.²⁷

Providing vapers with a well-regulated legal market will limit the distribution of illegal products. Failing to establish a legal vaping market results in the disastrous vaping market we currently have. The result of the FDA's decision is that flavored tobacco products, often produced abroad by companies that the FDA cannot punish, have flooded U.S. markets. Paired with high profit margins for retailers and little to no enforcement of product sales in the industry, unauthorized flavored products can be found in almost every vaping store nationwide.

23 "WSPM Group Empty Packs Survey USA_CA Q2 2023," August 2023, <https://www.altria.com/-/media/Project/Altria/Altria/about-altria/government-affairs/public-policy-positions/CA-EDP-Report.pdf>.

24 National Research Council and Institute of Medicine, *Understanding the U.S. Illicit Tobacco Market: Characteristics, Policy Context, and Lessons from International Experiences* (Washington, DC: National Academies Press, 2015), 4, <https://www.nap.edu/read/19016/chapter/1>.

25 Julie Bosman and Matt Richtel, "Vaping Bad: Were 2 Wisconsin Brothers the Walter Whites of THC Oils?," *The New York Times*, Sep. 17, 2019, <https://www.nytimes.com/2019/09/15/health/vaping-thc-wisconsin.html>.

26 U.S. Food and Drug Administration, "Vaping Illness Update: FDA Warns Public to Stop Using Tetrahydrocannabinol (THC)-Containing Vaping Products and Any Vaping Products Obtained Off the Street," Oct. 4, 2019, <https://www.fda.gov/consumers/consumer-updates/vaping-illnesses-consumers-can-help-protect-themselves-avoiding-tetrahydrocannabinol-thc-containing>.

27 David Downs, Dave Howard, and Bruce Barcott, "Journey of a tainted vape cartridge: from China's labs to your lungs," Leafly, Sep. 24, 2019, <https://www.leafly.com/news/politics/vape-pen-injury-supply-chain-investigation-leafly>; Conor Ferguson, Cynthia McFadden, Shanshan Dong, and Rich Schapiro, "Tests show bootleg marijuana vapes tainted with hydrogen cyanide," NBC News, Sep. 27, 2019, <https://www.nbcnews.com/health/vaping-tests-show-bootleg-marijuana-vapes-tainted-hydrogen-cyanide-n1059356>.

The same California study also gathered data on discarded e-vapor products in California in 2023. The data show that 97.9 percent (4,434 or 4,529 products) of discarded vapor products were flavored, unauthorized for sale in the United States. The leading brands of those products were Flum (headquartered in China), Elf Bar (China), and Lost Mary (China). In short, the FDA has handed the U.S. vaping market to illicit Chinese operators.

Legal markets suffer as untaxed and unregulated products have significant competitive advantages over highly taxed and regulated legal products. In addition to the dangers illicit markets create for consumers, illegal markets harm the large number of small business owners operating vape shops, convenience stores, and gas stations around the country.

Looking to the future, the Biden administration and the FDA committed to issuing a proposed product rule that would mandate a reduction of nicotine levels in cigarettes by as much as 95 percent.²⁸ If implemented, the rule would amount to a prohibition on cigarettes. Smuggling and illicit activity would skyrocket. Policymakers should consider the unintended consequences as they set rates and regulatory regimes for all tobacco and nicotine products.

28 Executive Office of the President, "Tobacco Product Standard for Nicotine Level of Certain Tobacco Products," Jun. 21, 2022, <https://www.reginfo.gov/public/do/eAgendaViewRule?publd=202204&RIN=0910-A176>.

Table 2. 2021 Cigarette Tax Rates and Smuggling Percentages

State	2021 State Tax Rate	Tax Rate Change (2020-2021)	2021 Smuggling Rates (positive is inflow, negative is outflow)	2021 Rank	Rank Change (2020-2021)	2021 Smuggling Revenue Impact	Smuggling Effect Revenue Change (2020-2021)
Alabama	\$0.68	0.0	-2.20%	33	1	\$3,666,329	-\$148,356
Arizona	\$2.00	0.0	32.80%	7	-1	-\$145,190,763	\$8,463,785
Arkansas	\$1.15	0.0	2.15%	30	-1	-\$3,595,597	\$613,845
California	\$2.87	0.0	44.02%	2	0	-\$1,335,954,140	\$55,982,957
Colorado	\$1.94	110.0	19.66%	14	8	-\$75,434,685	-\$63,211,729
Connecticut	\$4.35	0.0	24.75%	11	-3	-\$106,326,100	\$11,210,491
Delaware	\$2.10	0.0	-38.67%	46	-6	\$30,626,018	\$18,997,199
Florida	\$1.34	0.0	14.20%	20	-3	-\$164,015,769	\$8,756,029
Georgia	\$0.37	0.0	-3.78%	37	0	\$6,077,788	-\$604,466
Idaho	\$0.57	0.0	-31.57%	43	1	\$8,398,647	\$1,267,812
Illinois	\$2.98	0.0	26.24%	10	-3	-\$304,149,049	\$29,902,889
Indiana	\$1.00	0.0	-28.59%	42	4	\$82,466,022	-\$16,516,249
Iowa	\$1.36	0.0	7.03%	24	-1	-\$13,503,089	\$1,524,321
Kansas	\$1.29	0.0	19.03%	17	-3	-\$26,744,175	\$3,117,014
Kentucky	\$1.10	0.0	-0.31%	31	0	\$1,115,867	\$873,849
Louisiana	\$1.08	0.0	9.92%	23	-2	-\$27,106,869	-\$993,260
Maine	\$2.00	0.0	6.98%	25	-1	-\$8,976,743	\$572,997
Maryland	\$3.75	175.0	28.74%	8	22	-\$219,448,958	-\$219,311,525
Massachusetts	\$3.51	0.0	37.59%	4	5	-\$223,930,205	-\$51,283,842
Michigan	\$2.00	0.0	18.22%	18	-3	-\$175,558,030	\$19,497,775
Minnesota	\$3.67	2.3	33.16%	6	-1	-\$261,332,061	\$7,179,075
Mississippi	\$0.68	0.0	2.76%	29	-1	-\$3,042,616	\$292,114
Missouri	\$0.17	0.0	-16.23%	40	1	\$10,394,895	-\$967,901
Montana	\$1.70	0.0	19.46%	15	-4	-\$15,236,669	\$2,342,232
Nebraska	\$0.64	0.0	-2.67%	34	-2	\$1,276,253	\$928,637
Nevada	\$1.80	0.0	-18.08%	41	-2	\$24,864,264	\$9,082,616
New Hampshire	\$1.78	0.0	-34.13%	44	3	\$58,061,329	-\$9,629,758
New Jersey	\$2.70	0.0	-2.75%	35	0	\$14,611,504	\$1,489,826
New Mexico	\$2.00	0.0	38.31%	3	0	-\$52,791,039	\$12,840,697
New York	\$4.35	0.0	54.48%	1	0	-\$1,105,762,817	-\$12,657,588
North Dakota	\$0.44	0.0	-15.23%	39	3	\$2,518,415	-\$568,392
Ohio	\$1.60	0.0	5.72%	27	-2	-\$51,355,535	\$9,042,446
Oklahoma	\$2.03	0.0	10.19%	22	-3	-\$42,223,581	\$10,107,913
Oregon	\$3.33	200.0	26.24%	9	17	-\$148,318,794	-\$141,911,334
Pennsylvania	\$2.60	0.0	6.45%	26	-6	-\$78,424,101	\$80,552,616
Rhode Island	\$4.25	0.0	19.40%	16	-6	-\$35,805,456	\$3,887,984
South Carolina	\$0.57	0.0	-1.22%	32	1	\$1,683,513	-\$202,369
South Dakota	\$1.53	0.0	10.37%	21	-3	-\$5,629,810	\$1,350,157
Tennessee	\$0.62	0.0	-3.34%	36	0	\$7,229,651	\$442,619
Texas	\$1.41	0.0	21.07%	12	1	-\$289,007,313	\$11,283,566
Utah	\$1.70	0.0	19.83%	13	-1	-\$20,523,780	\$3,286,819
Vermont	\$3.08	0.0	3.47%	28	-1	-\$2,215,590	-\$306,429
Virginia	\$0.60	30.0	-34.51%	45	0	\$60,109,157	\$30,693,266
Washington	\$3.03	0.0	37.26%	5	-1	-\$191,513,489	\$39,755,634
West Virginia	\$1.20	0.0	-12.73%	38	0	\$17,833,317	\$9,506,540
Wisconsin	\$2.52	0.0	16.08%	19	-3	-\$98,453,313	\$18,620,769
Wyoming	\$0.60	0.0	-52.31%	47	-4	\$5,667,108	\$2,506,770

Note: Alaska, Hawaii, North Carolina, and the District of Columbia are not included in the study. Cigarette tax rates have changed for eight states since 2019 (Colorado, Illinois, Kentucky, Maryland, New Mexico, Oklahoma, Oregon, and Virginia) but are not reflected in the study.

Source: Mackinac Center for Public Policy, Tax Foundation, and author calculations.