

Food and Drug Administration’s Center for Tobacco Products
Written Comments for
Tobacco Product Standard for Menthol in Cigarettes and Characterizing Flavors in Cigars

Submitted by Michael LaFaive and Todd Nesbit, Ph.D.
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Thank you for the opportunity to submit a comment on the proposed regulations to prohibit menthol as a characterizing flavor in cigarettes¹ as well as characterizing flavors in cigars. We write specifically in response to the FDA’s interest “in receiving comments, including supporting data and research, regarding whether and to what extent this proposed rule would result in an increase in illicit trade in menthol cigarettes and how any such increase could impact the marketplace or public health.”²

We have reviewed the proposed regulations and feel compelled to offer some warnings about the unintended consequences about prohibiting menthol flavoring in cigarettes — namely, increased traffic in illicit markets.

In short, economic theory and empirical evidence indicate that the ban will almost assuredly result in a large increase in illicit tobacco trafficking. The contraband cigarette market in the United States, as we will demonstrate, is already substantial. Massachusetts, which has already effectively banned menthol cigarettes and flavored cigars, has seen a large leap — [nearly seven percentage points](#) — in its year-over-year cigarette smuggling rate. The Bay State, we fear, is a smuggling canary in a prohibition coal mine.

Over the remainder of the written comment, we will provide a short explanation about what our original, empirical evidence on cigarette smuggling finds. The [proposed rule](#) published by the FDA mentions illicit markets but, in our opinion, does not address the subject sufficiently.

Introduction and Credentials

We have dedicated much of our professional lives to studying the impact of cross-border economic activity. This includes rigorous studies of domestic cigarette smuggling, wine and liquor shopping tourism, gasoline quality and the impact of labor laws in (and over) counties on state borders. Our annual estimates of domestic cigarette tax evasion and avoidance on a state-by-state basis, what we call “smuggling,” are the only ones of their kind. We are told that they are eagerly reviewed by federal law enforcement, international NGOs and industry insiders here and overseas.

Our domestic figures also include an accounting of international trafficking along the Mexican and Canadian borders, estimates that would carry greater weight in the event of a national ban on menthol as a characterizing flavor.

LaFaive’s book chapter, “[Prohibition by Price](#),” has demonstrated parallels between America’s failed experiment with alcohol Prohibition and the modern era of cigarette “Prohibition by Price.” This latter phenomenon happens when the product remains legal but the tax burden placed on it encourages the same mischief associated with the Prohibition era.

Our annual smuggling estimates have been well-received here and abroad, and Professor Nesbit has been invited to speak on illicit cigarette markets before the [OECD Centre for Tax Policy and](#)

[Administration](#) in Paris and [Reconnaissance Internationale](#) in Vienna, Austria. He is also the co-editor of and contributor to the book, “For Your Own Good: Taxes, Paternalism, and Fiscal Discrimination in the Twenty-First Century.”

In 2008 the Mackinac Center for Public Policy published our study, along with Tax Foundation economist Patrick Fleenor, “[Cigarette Taxes and Smuggling: A Statistical Analysis and Historical Review.](#)” We regularly update the numbers we found in that report, and our most recent estimates were [made public](#) on Thursday, June 15. These domestic estimates should be of interest to the FDA because they shed light on the depth of an existing illicit market problem and on existing supply chains through which increased international smuggling might occur.

Recent Estimates of Cigarette Smuggling

Our statistical model³ compares legal paid sales and smoking rates by state, the latter of which is published by the federal government’s Center for Disease Control through its Behavioral Risk Factor Surveillance System (BRFSS). Smoking rates allow us to calculate how many cigarettes are getting smoked. The difference (or “residual”) between those figures and legal paid sales must be explained somehow, and we — as well as other scholars — lay it at the feet of tax evasion and avoidance, or smuggling.

This concept of using the residual has been adopted or adapted by other scholars for their own estimates of evasion and avoidance. One study that used this technique, by economist Mark Stehr and published in 2005, found that as much as 85% of a change in legal paid sales after a tax increase can be laid at the feet of tax evasion and avoidance,⁴ not from smokers kicking the habit.

An important caveat is that the Mackinac Center model can only be measured with a two-year delay due to the schedule with which the federal government publishes its smoking rate data. Our most recent figures, then, are for 2020. We estimate that 1.9 billion packs of cigarettes were consumed nationwide as a function of tax evasion and avoidance that year. The state-by-state estimates can be easily reviewed in this [interactive map](#) of the continental United States or in the chart posted further below.

The key takeaway from our research is that cigarette smuggling is already a huge problem, and it will be exacerbated greatly by a nationwide ban on characterizing flavors. Each fresh release of our state-by-state estimates contains a ranking of states. In the most recent edition, New York was again the No. 1 state with nearly 54% of the cigarettes consumed there having been smuggled. On the opposite end of that spectrum is New Hampshire. For every 100 cigarettes consumed in the Live Free or Die State, an additional 52 are smuggled out to other states, like neighboring Massachusetts.

The most interesting and perhaps useful statistic to come from this year’s estimates involves Massachusetts, which effectively banned menthol cigarettes, flavored cigars, and other flavored tobacco products. The law doing this took effect in mid-2020.⁵ That means we were able to update our model with only six months of Bay State-specific smoking rate data. Despite this limitation, we were able to measure a seven-point leap in the state’s cigarette smuggling rate, from 20% to 27% of total consumption.

Anyone paying the slightest attention to [news headlines](#) in that state might have already known smuggling was up. In June 2021, a New Hampshire resident was busted for trafficking contraband tobacco, vaping products and marijuana. In March the state’s Multi-Agency Illegal Tobacco Task Force

published a [headline-making](#) formal report that clearly indicated a rise in illicit traffic. The report states in part:

The increase in seizures of flavored ENDS products and menthol cigarettes combined with the decrease in revenue for cigarettes and OTP likely indicates increased cross-border smuggling of these products. Several neighboring states, including New Hampshire, Rhode Island, and Vermont, have reported an increase in tobacco revenue related to cigarettes and OTP during the past year.⁶

Impacts of a National Ban

These kinds of stories are not unusual and will become much more prevalent in the event of a nationwide ban. Smugglers want to move a product that is profitable and easy to transport. Adding menthol cigarettes and (or) flavored cigars to their existing supply chain will just expand their profits. We also would expect old international supply chains to expand to include menthol-flavored cigarettes. New criminal enterprises will develop with time, as well. In 2006 one cigarette smuggling cell with international links was even charged with trafficking [counterfeit Viagra and baby formula](#).

The increase in illicit trafficking should surprise no one, though, given the nation's [history with alcohol Prohibition](#) and the global historical experience of illicit markets in general. It is, however, an estimate that should give federal regulators pause when deciding whether to go forward with a characterizing flavor ban. It is not the only available data, however, that should raise bright red flags for federal, state and local officials, including law enforcement, which will be called upon to enforce any prohibition.

Data on sales and revenue for tobacco and other tobacco products⁷ are available from the consultancy of Orzechowski & Walker, which gathers data from state departments of revenue. It indicates that there was a 14% drop in tax-paid sales in the Bay State from calendar year 2020 through calendar year 2021. The decline may be larger than that. Tax-paid sales dropped 20% from April 2021 to April 2022. It would be terribly naive of officials to assume that these sales drops came from people giving up smoking.

A much more likely explanation is that people simply turned to other sources, such as neighboring states. The same data from Orzechowski & Walker shows that while legal-paid sales dropped in Massachusetts, they rose in New Hampshire by 19% between calendar year 2019 and 2020. Every state that borders Massachusetts saw sales leap during that same time. The only exception was New York, which saw a drop of 0.1 percentage points. Remarkably, Connecticut sales increased despite having a cigarette excise tax higher than the Bay State.

Our own 2020 estimates indicate that New Hampshire's treasury received \$68 million more in cigarette excise tax revenues than it would have had absent all cigarette smuggling. This is important because it implies a willingness by individuals or organized crime networks to save or make money by purchasing products they want to move across a border.

Even before the menthol ban in Massachusetts took effect, the illicit market in Massachusetts was so big that law enforcement didn't have [enough storage space](#) for seized tobacco products. "The Task Force has outgrown its current storage facilities and has spent time in the past year exploring other storage options to accommodate the growing amount of seized contraband tobacco which has negatively affecting (sic) overall investigative efforts." That is from a 2021 [Memorandum of Understanding](#)

between the state's Illegal Tobacco Task Force and the state police, as they looked for additional dedicated storage space.

The FDA should have been or should be perfectly aware of likely consumer and smuggler responses to banning menthol in Massachusetts. In its proposed rule on menthol as a characterizing flavor, the agency discusses its request of the National Research Council and Institute of Medicine to explore the illicit tobacco market, including an international component.⁸ The proposed rule sources the study that was born of that request briefly on the impact of regulation to modify conventional cigarettes¹ but says little to nothing of the substantial and plausible upper bound of smuggling rates reported or the survey data suggesting "possible engagement with the illicit market"⁹ should menthol cigarettes be banned.

That report, titled, "Understanding the U.S. Illicit Tobacco Market: Characteristics, Policy Context and Lessons from International Experiences," found domestic cigarette sales related to tax evasion and avoidance among states to be between 8.5% and 21%.¹⁰ It also discussed menthol bans. The authors point to a survey that found 25% of menthol users "would find a way to buy a menthol brand"¹¹ if menthol-flavored products were banned. It also found that a higher percentage would try to kick the habit.

Clearly, the illicit market is a big problem in the states that have not implemented an outright prohibition on menthol smokes. Massachusetts' problems are relatively small compared to what would happen under a national ban. New York and California have the highest smuggling rates. In just these two states, 736 million packs of the cigarettes consumed in 2020 were smuggled. Absent smuggling, the two would enjoy \$2.5 billion more in cigarette excise tax revenues. High taxes on cigarettes create a vast market for illegal activities even when cigarettes are legal products.¹²

The following graphic is our estimate of smuggling rates by state.

¹ "[O]verall, the limited evidence now available suggests that if conventional cigarettes are modified by regulations, the demand for illicit versions of them is likely to be modest." "Tobacco Product Standard for Menthol in Cigarettes" (Silver Springs, MD: Food and Drug Administration, Health and Human Services, 2022), p. 26,483, <https://www.govinfo.gov/content/pkg/FR-2022-05-04/pdf/2022-08994.pdf>.

State Cigarette Smuggling as a Percentage of Total State Cigarette Consumption (Legal and Illegal), 2020

	State	Total		State	Total		State	Total		State	Total
1	NY	-53.51%	13	TX	-20.50%	25	OH	-6.66%	37	GA	4.24%
2	CA	-44.82%	14	KS	-20.23%	26	OR	-3.29%	38	WV	5.51%
3	NM	-43.46%	15	MI	-19.65%	27	VT	-3.16%	39	NV	10.45%
4	WA	-41.58%	16	WI	-18.15%	28	MS	-2.93%	40	DE	12.23%
5	MN	-34.76%	17	FL	-14.57%	29	AR	-2.49%	41	MO	17.78%
6	AZ	-33.53%	18	SD	-12.38%	30	MD	-0.04%	42	ND	18.62%
7	IL	-29.21%	19	OK	-12.28%	31	KY	0.07%	43	WY	24.35%
8	CT	-26.69%	20	PA	-12.03%	32	NE	0.71%	44	ID	25.80%
9	MA	-26.52%	21	LA	-9.52%	33	SC	1.37%	45	VA	27.58%
10	RI	-23.33%	22	CO	-7.96%	34	AL	2.32%	46	IN	35.56%
11	MT	-21.44%	23	IA	-7.81%	35	NJ	2.38%	47	NH	52.40%
12	UT	-21.35%	24	ME	-7.24%	36	TN	3.17%			

Lest the reader believe that our findings are rare, or even an anomaly in the wider body of academic literature, consider that three studies in the last nine years ([2013](#)¹³, [2015](#)¹⁴, and [2019](#)¹⁵) have found or reported nationwide tax evasion and avoidance rates of up to 21%, though the 2015 study considers that figure the top end of a plausible range, using a different estimate.

There have been a substantial number of other U.S.-specific studies since 2005 — from university scholars published in peer review journals — that also attempt to measure domestic tax evasion and avoidance. They looked at a variety of places and have used different methodological approaches. Estimates in this scholarship place smuggling rates as high as 76%, though applied to a very limited geographical area. The table below is an updated collection of such studies from a previous literature review published by LaFaive in his book chapter, “Prohibition by Price.”

Estimates of Cigarette Tax Avoidance, Expressed in Percentages of Tax Stamps, Cigarettes, Packages of Cigarettes, or Consumers

Estimates of Avoidance	Methods Used to Make Estimate	Reference
4.5 percent of stamps showed tax stamp from Virginia; 10.6 percent were counterfeit	Examine tax stamps on 830 cigarette purchases made in New York, looking for counterfeit or out-of-state stamps	Reference Silver et al. (2015)
8.5 percent of cigarettes smoked (net) were purchased in another jurisdiction.	Determine market share of avoidance and evasion by comparing the difference between reported smoking rates and legal sales	National Research Council (2015)
19 percent of consumers surveyed sought tax avoidance	Ask survey respondents in New York State how often they purchase from Indian reservations	DeCicca et al. (2014)
20–21 percent of packs owned by subjects may have been acquired outside participants' home state	Classify unopened packs sent in by smokers as taxed or untaxed by smokers' home jurisdiction	Fix et al. (2013)
4.1–18.7 percent of smokers acknowledged buying cigarettes in other jurisdictions	Examine smokers' acknowledgments of cross-border purchases in US Census Bureau surveys	DeCicca et al. (2010)
13–25 percent of smokers (nationally) and up to 63 percent in Washington, DC, buy in other jurisdictions	Determine percentage of smokers in metropolitan areas who buy cigarettes across taxing jurisdictions based on estimates of cigarette demand	Lovenheim (2008)
4 percent of smokers will cross a state border to purchase cigarettes	Estimate casual smuggling based on surveys of purchasing behavior reveal that smokers will travel 2.7 miles to save a dollar	Chiou and Muehlegger (2008)
34 percent of smokers shop in untaxed/low tax venue	Survey smokers by telephone to explore patterns for purchases	Hyland et al. (2005)
30.5–42.1 percent of packs are trafficked across a jurisdiction	Examine discarded packs in five northeastern cities	Davis et al. (2013)
76.2 percent of packs avoided state and local tax through an absent or counterfeit stamp	Examine discarded packs in South Bronx to calculate number of cigarettes that avoided city and state tax	Kurti et al. (2012)
15 percent of packs were without a stamp; went up to 24 percent after tax increase	Examine discarded packs in New York, before and after a tax increase, looking for packs without a stamp	Chernick and Merriman (2011)
29 percent of packs in Chicago area bore the Indiana tax stamp; only 25 percent carried the city tax stamp	Examine discarded packs in Chicago for evidence of out-of-jurisdiction stamps	Merriman (2010)
12.7 percent of cigarettes in 2001 obtained through avoidance and evasion	Compute difference between reported smoking rates and sales	Stehr (2005)
21% tax noncompliance rate	Littered cigarette pack collection across 132 communities	Wang, et. al (2019)

Source: Michael LaFaive, *For Your Own Good: Taxes, Paternalism, and Fiscal Discrimination in the Twenty-First Century*.

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The Mackinac Center includes two international borders in its calculations (Canada and Mexico). The international component of our model is important because a national ban on menthol as a characterizing flavor will likely result in greater *international* smuggling.

We find that northern states are source states for illicit cigarettes transported to Canada, though export rates are small. For example, for every 100 cigarettes consumed in Vermont, an additional two are smuggled out to Canada.¹⁶

Our measure of smuggling along the Mexican border indicates that Mexico is a major source of illicit cigarettes, especially in the Southwestern United States. We find, for example, that over 19% of all the cigarettes consumed in Arizona in 2020 were smuggled in from Mexico. That figure was almost 18% for New Mexico and almost 17% for California.¹⁷

It is also possible, if not likely, that part of our model's accounting of international smuggling from Mexico is instead attributable to the large and efficient system of bonded warehouses and foreign trade zones in the United States. The Mackinac Center has long worked to obtain data that would allow us to measure international smuggling into the United States through these locations but — to date — has not been able to acquire the necessary statistics.

Anecdotal evidence that internationally sourced cigarettes are moving through bonded warehouses should put the Food and Drug Administration's Center for Tobacco Products on high alert. In 2020 U.S. Immigration and Customs Enforcement officials announced a guilty plea from one Texas man who had imported millions of [contraband cigarettes](#) from abroad into his two warehouses with the intention of re-exporting them to Mexico. Officials confiscated nearly 423 million contraband cigarettes.¹⁸ That is roughly equal to all the cigarette packs legally sold in Vermont (20 million) and Alaska (21.6 million) that same year.¹⁹

There are other examples involving recent illegal importation of internationally sourced cigarettes through our port system, including a [diversion of cigarettes](#) bound for overseas markets into the Los Angeles area and [another case in Florida](#).

In 2019 one Michigan State University student was [busted](#) for receiving cigarettes from overseas through United Parcel Service. He was redistributing them here and possessed 21 keys to UPS store post office boxes across Michigan. Employees from just one store said the student received more than 70 boxes. That is just one person at one UPS store smuggling cigarettes from overseas.

Government officials struggle to keep illicit cigarettes, drugs and other contraband out of America's [local jails](#) and [state](#) and [federal prisons](#). This indicates that even substantial infringements on privacy and civil society wouldn't stop the increased flow of internationally sourced cigarettes if popular product were banned nationwide. Removing menthol as a characterizing flavor from products will just incentivize more people — here and abroad — to become cigarette scofflaws.

Conclusion

The FDA and its Center for Tobacco Products should seek a deeper understanding of illicit international trade and its consequences. The problem is complex and would grow dramatically under these proposals. In 2015 the United States Department of State released a report, "[A Global Illicit Trade in Tobacco: A Threat to National Security](#)."²⁰ It quotes President Barack Obama, who said, "Criminal

networks are not only expanding their operations, but they are also diversifying their activities, resulting in a convergence of transnational threats that has evolved to become more complex, volatile, and destabilizing.” If this observation is correct, then banning menthol cigarettes and flavored cigars will not help. Transnational organizations will just have one more incentive to smuggle.

The available scholarship strongly indicates that a ban on menthol cigarettes would have far-reaching consequences. The FDA’s proposed rule and communications to date understate the dangers of the illicit cigarette market. We suggest the agency reconsider its proposed rule to ban these products.

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- ¹ “Tobacco Product Standard for Menthol in Cigarettes” (Silver Springs, MD: Food and Drug Administration, Health and Human Services, 2022), 26,473, <https://www.govinfo.gov/content/pkg/FR-2022-05-04/pdf/2022-08994.pdf>.
- ² “Tobacco Product Standard for Menthol in Cigarettes” (Silver Springs, MD: Food and Drug Administration, Health and Human Services, 2022), 26,484, <https://www.govinfo.gov/content/pkg/FR-2022-05-04/pdf/2022-08994.pdf>.
- ³ Michael LaFaive, Patrick Fleenor and Todd Nesbit, “Cigarette Taxes and Smuggling: A Statistical Analysis and Historical Review” (Mackinac Center for Public Policy, Dec. 2008), Appendix A, <https://perma.cc/ZTR2-DCTP>.
- ⁴ Mark Stehr, “Cigarette Tax Avoidance and Evasion,” *Journal of Health Economics* 24 (2005): 280, <https://perma.cc/668V-XAT4>.
- ⁵ “Annual Report of Multi-Agency Illegal Tobacco Task Force” (Boston, MA: Commonwealth of Massachusetts, 2022), 4, <https://www.mass.gov/doc/task-force-fy22-annual-report/download>.
- ⁶ “Annual Report of Multi-Agency Illegal Tobacco Task Force” (Boston, MA: Commonwealth of Massachusetts, 2022), 8, <https://www.mass.gov/doc/task-force-fy22-annual-report/download>.
- ⁷ Rob Walker, “MA TaxPaid Sales and OTP Revenues YoY and Regional Comparisons.Xlsx.” (Arlington, VA: Rob Walker, 2022). Email with Excel spreadsheet attachment to Michael LaFaive May 27.
- ⁸ “Tobacco Product Standard for Menthol in Cigarettes” (Silver Springs, MD: Food and Drug Administration, Health and Human Services, 2022), 26,483, <https://www.govinfo.gov/content/pkg/FR-2022-05-04/pdf/2022-08994.pdf>.
- ⁹ Editors Peter Reuter and Malay Majmundar, “Understanding the U.S. Illicit Tobacco Market: Characteristics, Policy Context, and Lessons from International Experiences (2015)” (National Academies, 2015), 183, <https://nap.nationalacademies.org/catalog/19016/understanding-the-us-illicit-tobacco-market-characteristics-policy-context-and>.
- ¹⁰ Editors Peter Reuter and Malay Majmundar, “Understanding the U.S. Illicit Tobacco Market: Characteristics, Policy Context, and Lessons from International Experiences (2015)” (National Academies, 2015), 4, <https://nap.nationalacademies.org/catalog/19016/understanding-the-us-illicit-tobacco-market-characteristics-policy-context-and>.
- ¹¹ Editors Peter Reuter and Malay Majmundar, “Understanding the U.S. Illicit Tobacco Market: Characteristics, Policy Context, and Lessons from International Experiences (2015)” (National Academies, 2015), 183, <https://nap.nationalacademies.org/catalog/19016/understanding-the-us-illicit-tobacco-market-characteristics-policy-context-and>.
- ¹² Michael LaFaive and Nesbit Todd, “Mackinac Center for Public Policy,” *Cigarette Taxes & Smuggling*, <https://www.mackinac.org/smokes#map> (accessed Jun. 28, 2022). Authors’ calculations from published pack and revenue data.
- ¹³ Brian V Fix et al., “A Novel Approach to Estimating the Prevalence of Untaxed Cigarettes in the USA: Findings from the 2009 and 2010 International Tobacco Control Surveys,” *Tobacco Control* 23, no. suppl 1 (Mar. 22, 2014): i61, <https://perma.cc/RUP8-4PJ8>.
- ¹⁴ Peter Reuter and Malay Majmundar, eds., “Understanding the U.S. Illicit Tobacco Market: Characteristics, Policy Context, and Lessons from International Experiences” (National Research Council and Institute of Medicine, 2015), 4, <https://perma.cc/H2KY-F6R8>.
- ¹⁵ Shu Wang, David Merriman and Frank J Chaloupka, “Relative Tax Rates, Proximity, and Cigarette Tax Noncompliance: Evidence from a National Sample of Littered Cigarette Packs,” *Public Finance Review* (2019): Abstract, <http://journals.sagepub.com/doi/abs/10.1177/1091142118803989>.
- ¹⁶ Authors’ calculations, State Cigarette Smuggling as a Percentage of Total State Cigarette Consumption (Legal and Illegal), 2020. Complete findings for exports to Canada or imports to Mexico available upon request.
- ¹⁷ Authors’ calculations, State Cigarette Smuggling as a Percentage of Total State Cigarette Consumption (Legal and Illegal), 2020. Complete findings for imports from Mexico or exports to Canada available upon request.
- ¹⁸ “South Texas Man Pleads Guilty of Attempting to Export Millions of Cigarettes,” *Newsroom: U.S. Immigration and Custom’s Enforcement*, <https://www.ice.gov/news/releases/south-texas-man-pleads-guilty-attempting-export-millions-cigarettes> (accessed Jun. 29, 2022).
- ¹⁹ William Orzekowski and Rob Walker, “Tax Burden on Tobacco: Volume 56” (Arlington, VA: Orzechowski and Walker, 2022), 51.
- ²⁰ “The Global Illicit Trade in Tobacco” (Washington, D.C.: U.S. Department of State, 2015), 2, <https://2009-2017.state.gov/documents/organization/250513.pdf>.