

Potential Effects of a Tax Increase on Tobacco Products and Ban on the Sale of Flavored Tobacco Products in Michigan*

Summary Highlights

Tobacco tax increases are one of the most effective policies to reduce tobacco use, especially among youth. Ending the sale of flavored tobacco products will reduce tobacco use initiation, lead current tobacco users to quit, improve health, and save lives. Combining these policies will increase Michigan's tobacco tax revenues while at the same time significantly reduce tobacco use and health care spending, including Medicaid spending, in the state. The public health and economic benefits of these policies are substantial, as detailed below.

Public Health Impact of the \$1.50 Cigarette Tax and Ban on Sale of Flavored Tobacco Products:¹

- 76,600 smokers would quit as a result of the policies
- 22,800 premature smoking-caused deaths avoided
- Fewer youth initiating smoking

Fiscal Impact of the \$1.50 Cigarette and Tobacco Tax Increase and Ban on Sale of Flavored Tobacco Products:

- \$91.3 million increase in cigarette tax revenue plus additional revenue from increasing the tax on other tobacco products
- \$1.0 billion in long-term health care cost savings for the state

The projected health care savings and public health benefits are conservative because they do not include the impact on youth who will not start to smoke as a result of these policies. Preventing Michigan kids from becoming addicted smokers would secure additional millions of dollars in future health care cost savings.

Public Health and Economic Burden of Tobacco Use in Michigan

Tobacco use remains the leading cause of preventable death in the United States, killing more than 480,000 Americans each year, including 16,200 adults in Michigan. Each year, 15,700 Michigan kids try their first cigarette; and another 1,380 additional kids become new regular, daily

smokers. Youth e-cigarette use remains a serious public health problem nationally as well as in Michigan, where youth e-cigarette use has surpassed cigarette smoking. Flavors, including menthol, play a key role in youth use of tobacco products. Tobacco use is known to cause cancer, heart disease and respiratory diseases, among other serious health problems.

¹ Only includes projections from the cigarette tax increase and ban on the sale of menthol cigarettes.

In addition to tobacco's impact on health and well-being, tobacco use imposes a considerable financial toll on the economy. The Centers for Disease Control and Prevention (CDC) estimates that in Michigan, tobacco use costs an estimated \$5.3 billion in health care costs each year, including approximately \$1.5 billion in state Medicaid expenditures.

These burdens on the state highlight the need to implement evidence-based policies to reduce tobacco use.

Introduction

The National Cancer Institute, World Health Organization, U.S. Surgeon General, International Agency for Research on Cancer, and other major health organizations consistently endorse tobacco tax increases as an effective policy to reduce tobacco use.

In recent years, state and local governments in the U.S. have implemented policies banning the sale of flavored tobacco products and/or flavored liquids used in vaping. At the same time, policies banning the sale of flavored tobacco products have been implemented at the national level in a few countries, while a growing number of others have adopted but not yet implemented similar policies. Efforts to evaluate the effects of these policies on prevalence, consumption, and sale of tobacco and vaping products are ongoing and new evidence is rapidly emerging.

A variety of methodological approaches have been applied in efforts to understand the potential and actual impact of a ban on the sale of flavored tobacco and other nicotine products on the use of these products and on overall tobacco product use. These include: asking flavored tobacco product users how they would respond to a ban on the sale of flavored products, experiments that assess tobacco users' choices under different scenarios, including when flavored products are not available; evaluation of the impact of bans on the sale of flavored products in jurisdictions that have implemented these policies; and others. The most

relevant evidence comes from Canada, where bans on the sale of menthol cigarettes were implemented in many provinces, beginning with Nova Scotia in May 2015, and culminating with a national ban in October 2017. The research on the potential and actual effects of comprehensive bans on the sale of flavored tobacco and other nicotine products suggests that these policies will reduce the use of the banned products and reduce overall use of tobacco and vaping products. Reductions in use will result from both increases in cessation among flavored product users, as well as reductions in initiation among potential users. At the same time, many continuing users are likely to substitute to non-flavored products, while some will avoid/evade the policy by obtaining flavored products from jurisdictions where the products remain available, or through illicit vendors.

Published studies about the experience in Massachusetts, the first state to prohibit the sale of menthol cigarettes and other flavored tobacco products, found minimal or no significant impact on cross-border sales in neighboring states, while cigarette sales in Massachusetts declined considerably, showing that the policy has effectively reduced access to and use of menthol cigarettes in that state.

The Impact of a \$1.50 Tobacco Tax Increase on Tobacco Tax Revenues and Public Health

Key Projections:

- Percent reduction in youth smoking: 12.4%
- Percent of adult smokers who would quit: 3.8%
- Percent reduction in overall cigarette consumption: 17.2%

Michigan currently taxes cigarettes at \$2.00 per pack, which has not changed since 2004. Other tobacco products are also taxed at various rates.

Based on a model developed by Tobacconomics, the Campaign for Tobacco-Free Kids, and the American Cancer Society Cancer Action Network, a \$1.50 per pack cigarette tax increase in Michigan would generate a significant amount of new revenue for

the state. In addition, equalizing the tax on other tobacco products to the new cigarette tax will generate even more revenue for the state.

These increases in tax, and ultimately in the price of tobacco products is expected to have a beneficial impact on public health. On average, a ten percent increase in price would reduce adult prevalence by nearly two percent and increase adult cessation by almost four percent, while reducing youth initiation by more than four percent.

These reductions in tobacco use will also generate millions of dollars in health care cost savings for the state in the short and long term.

The Impact of a Comprehensive Flavor Ban on Tobacco Tax Revenues and Public Health

Key Projections:

- Percent of menthol cigarette smokers who would quit: 5.6%
- Menthol cigarettes portion of total cigarettes in Michigan: 32.4%
- Percent reduction in overall cigarette consumption: 21.3%

Research indicates that the Canadian ban on menthol cigarettes significantly increased smoking cessation among menthol smokers, with cessation rates 50 to 100 percent higher for menthol smokers than for non-menthol smokers following the implementation of the provincial and national bans. Given this range, I assume that a comprehensive flavor ban will raise the quit rate for menthol smokers by 75 percent relative to that of non-menthol smokers. Given estimates that 7.4 percent of smokers are recent quitters, this implies that almost 5.6 percent of menthol smokers would quit in the short run in response to a ban. Based on data from the 2018/19 Tobacco Use Supplement to the Current Population Survey (TUS-CPS), about 38.1 percent of smokers smoked menthol cigarettes in Michigan. Based on the same TUS-CPS data, menthol smokers in Michigan smoke fewer cigarettes per month, on average, than non-menthol smokers – 320 cigarettes vs. 412

cigarettes, respectively. Given the prevalence of menthol smoking and lower average cigarette consumption among menthol smokers, menthol cigarettes account for approximately 32.4 percent of total cigarette consumption.

Among menthol smokers who continue to smoke after the ban, many will switch to non-menthol cigarettes or other tobacco products, while some will continue to smoke menthol cigarettes. The Canadian data suggest that roughly 70 percent of those who continue to smoke will substitute to non-menthol cigarettes, with the remainder purchasing menthol cigarettes from jurisdictions where they continue to be available and/or from illicit sources, or switching to other tobacco/nicotine products.

Early experiences with the comprehensive flavor bans in Massachusetts and California suggest larger declines in tax-paid cigarette sales than implied by the Canadian experience, likely due to higher rates of menthol cigarette use in U.S. states compared to Canada. Taken together, these data suggest that overall tax paid cigarette sales in Michigan would fall by 21.3 percent in response to a comprehensive flavor ban, with a corresponding reduction in cigarette tax revenues.

Projecting the impact of a comprehensive flavor ban on use of, and tax revenues from, other tobacco/nicotine products is more speculative given the limited data available. Using the average share of flavored tobacco product sales for the years from 2011 through 2015 for cigars and smokeless tobacco, flavored share of e-cigarettes in Michigan from retail sales data through December 2022, and assuming that the reductions in sales of other flavored tobacco products are of a similar magnitude to the reduction in the sale of menthol cigarettes, I estimate that other tobacco product sales and resulting other tobacco product tax revenues (including e-cigarettes) would fall by 20.9 percent in Michigan.

These estimated reductions in revenues are based on limited data and research evidence and are likely to be imprecise. To some extent, they are likely to overstate the actual declines in revenues as they do

not consider the substitution between cigarettes and other tobacco products and e-cigarettes that might result from a flavor ban and given that at least some tobacco users who quit in response to the ban may eventually relapse and consume non-flavored products. Strengthened enforcement and increased penalties on illicit traders can reduce illegal sales of flavored products and lessen the impact of the flavor ban on tobacco tax revenues.

While a comprehensive flavor ban would lead to modest reductions in Michigan's tobacco tax revenues, it will also improve public health and reduce health care costs, given the reductions in tobacco use that result.

Combined Impact of the Tobacco Tax Increase and a Comprehensive Flavor Ban

Together, the \$1.50 per pack cigarette tax increase in Michigan, combined with a sales ban of menthol cigarettes would still produce \$91.3 million in new revenue for the state. The revenue on other tobacco products would also increase overall, given the significant increase in the tax rates.

As described above, a comprehensive flavor ban will result in almost 5.6 percent more menthol smokers quitting smoking in the short run. Given an estimated 1.3 million adult current smokers in Michigan, about 38 percent of whom smoke

menthol cigarettes, this implies that over 27,800 adults would quit smoking in response, resulting in about 6,500 fewer deaths caused by smoking. On top of that, an additional 48,800 adults will quit as a result of the cigarette tax increase and save 11,400 more adults from premature smoking-caused deaths.

The tax increase will prevent 14,600 youth from starting to smoke and save 4,900 from premature death. The existing evidence suggests that a comprehensive ban would deter additional young people from taking up tobacco use, adding to the public health benefits.

Finally, the reductions in tobacco use resulting from a tobacco tax increase and comprehensive flavor ban would lead to significant reductions in health care spending, including Medicaid spending, with an estimated reduction in lifetime health care spending of \$1.0 billion for those induced to quit by the policies.

FDA recently announced its intention to ban menthol cigarettes and flavored cigars, but the process to do so will take many years. In the meantime, Michigan can enact a comprehensive flavor ban to start saving lives and health care costs now.

*For more details, see: Chaloupka FJ (2023). *Potential Effects on Tobacco Tax Revenues of a Ban on the Sale of Flavored Tobacco Products: 2023 Update*. Chicago, IL: Tobacconomics Research Program, Institute for Health Research and Policy, University of Illinois at Chicago; www.tobacconomics.org.

Suggested Citation

Chaloupka, F. J. *Potential Effects of a Ban on the Sale of Flavored Tobacco Products in Michigan*, University of Illinois at Chicago, 2023.

About Tobacconomics

Tobacconomics is a collaboration of leading researchers who have been studying the economics of tobacco control policy for nearly 30 years. The team is dedicated to helping researchers, advocates and policymakers access the latest and best research about what's working—or not working—to curb tobacco consumption and the impact it has on our economy. As a program of the University of Illinois at Chicago, Tobacconomics is not affiliated with any tobacco manufacturer. Visit www.tobacconomics.org or follow us on Twitter <https://twitter.com/Tobacconomics>.