

Potential Effects of a Ban on the Sale of Flavored Tobacco Products in Minnesota*

Summary Highlights

Ending the sale of flavored tobacco products will reduce tobacco use initiation, lead current tobacco users to quit, improve health, and save lives. The policy will result in modest reductions in Minnesota's tobacco tax revenues while at the same time lead to significant reductions in 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:

- Over 6,500 smokers (5.6% of menthol smokers) would quit as a result of the policy
- Over 1,500 premature smoking-caused deaths avoided
- Fewer youth initiating smoking with menthol cigarettes

Fiscal Impact:

- Over \$56.0 million in long-term health care cost savings for the state
- \$17.4 million decline in cigarette tax revenue (5.3% decline)
- \$9.3 million decline in other tobacco products tax revenue (7.9% decline)

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 this policy. Preventing Minnesota's 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 Minnesota

Tobacco use remains the leading cause of preventable death in the United States, killing more than 480,000 Americans each year, including 5,900 adults in Minnesota. Each year, 7,500 Minnesota kids try their first cigarette; and another 660 additional kids become new regular, daily smokers. Youth e-cigarette use remains a serious public health problem nationally as well as in Minnesota, 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.

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 Minnesota, tobacco use costs an estimated \$2.92 billion in health care costs each year, including approximately \$605.4 million in state Medicaid expenditures.

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

Introduction

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.

Modeling the Impact of a Comprehensive Flavor Ban Public Health

Key Projections:

- Percent of menthol smokers who would quit: 5.6%
- Menthol cigarettes portion of total cigarettes in Minnesota: 18.2%
- Percent reduction in overall cigarette consumption from menthol smokers quitting: 1.0%
- Percent reduction in overall cigarette consumption from menthol smokers switching to non-menthol cigarettes or other tobacco products, policy avoidance and evasion: 4.3%

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 21.0 percent of smokers smoked menthol cigarettes in Minnesota. Based on the same TUS-CPS data, menthol smokers in Minnesota smoke fewer cigarettes per month, on average, than non-menthol smokers – 286 cigarettes vs. 342 cigarettes, respectively. Given the prevalence of

menthol smoking and lower average cigarette consumption among menthol smokers, menthol cigarettes account for approximately 18.2 percent of total cigarette consumption. Taken together, these data imply that a comprehensive flavor ban in Minnesota would reduce overall cigarette consumption by 1.0 percent, given increased cessation among menthol smokers.

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. These data imply a potential reduction in tax paid cigarette sales in Minnesota due to avoidance and evasion of the ban or switching to other products of 4.3 percent.

Together, overall tax paid cigarette sales in Minnesota would fall by 5.3 percent in response to a comprehensive flavor ban, with a corresponding reduction in cigarette tax revenues. Given the estimated cigarette excise tax revenues of over \$326 million in FY2024, this implies a drop of about \$17.4 million 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 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 (excluding e-cigarettes) and resulting other tobacco product tax revenues would fall by 7.9 percent in Minnesota. Given the estimated other tobacco product tax revenues of \$118.3 million in FY2024,

this implies a reduction in other tobacco product tax revenues of \$9.3 million.

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 Minnesota's tobacco tax revenues, it will also improve public health given the reductions in tobacco use that result. 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 559,600 adult current smokers in Minnesota, about 21 percent of whom smoke menthol cigarettes, this implies that over 6,500 adults would quit smoking in response, resulting in over 1,500 fewer deaths caused by smoking.

The existing evidence suggests that a comprehensive ban would also deter numerous young people from taking up tobacco use, adding to the public health benefits.

Finally, the reductions in tobacco use resulting from a 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 over \$56 million for those induced to quit by the policy.

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, Minnesota can enact a comprehensive flavor ban to start saving lives and health care costs now.

*For more details, see: Chaloupka FJ (2020). *Potential Effects on Tobacco Tax Revenues of a Ban on the Sale of Flavored Tobacco Products*. Chicago, IL: Tobacconomics Research Program, Institute for Health Research and Policy, University of Illinois at Chicago; www.tobacconomics.org.

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