



RAISING THE TOBACCO SALE AGE TO 21 WILL HAVE MINIMAL FISCAL IMPACT ON MICHIGAN STATE REVENUES

Based on the current understanding of youth and young adult smoking initiation and consumption patterns, raising the tobacco sale age to 21 will help reduce tobacco use and save lives over the long run while having little to no fiscal impact in the short run.

A tobacco sale age of 21 is expected to have minimal to no fiscal impact in the short run because:

- 18- to 20-year olds account for a very small share of total cigarette consumption (roughly 2 to 4 percent) and unfortunately most of them will not stop smoking as a result of this policy. They will not stop because of addiction and continued access to tobacco through social connections and non-compliant retailers.
- While counter-intuitive, all or most 18- to 20-year olds do not need to stop smoking for the policy to work. The primary impact of the policy is to prevent or delay the initiation of tobacco use among adolescents and youth. The policy is not expected to have a dramatic and immediate effect on adult smoking, which accounts for most of the state's cigarette sales;
- The effect of the policy will be gradual - reductions in smoking initiation and prevalence will initially be small and will grow over time.

Thus, the policy begins working immediately to make it harder for youth and young adults to obtain cigarettes, but the declines in smoking prevalence that would impact state revenues would take time to accumulate.

Because this is a new policy with little evidence or experience from other jurisdictions regarding the impact on tobacco tax revenue, one must rely on evidence and reasoning provided in the Institute of Medicine (IOM) report to make assumptions about what is likely to occur. As is explained in greater detail below, based on information included in the IOM report and what is known about tobacco use patterns among young adults, the short-term fiscal impact is likely to be very minimal. **The impact on cigarette tax revenue over the first five years is estimated to be a fraction of one percent; that is, an estimated ¼ of one percent.**¹ The impact on tax revenue in the first year would be even less.

Raising the Tobacco Sale Age Will Have Minimal to No Fiscal Impact on State Revenues

A policy to increase the tobacco sale age to 21 works gradually over time to reduce rates of smoking initiation and smoking prevalence. Reductions will be small initially and will grow over time. As a result, there will be little short-term effect on tobacco sales revenue.

- The Institute of Medicine (IOM) issued a comprehensive report in 2015 on the predicted impacts of raising the tobacco sale age. The report found that the policy will primarily affect 15-17 year olds in the first several years of implementation and that there will be a gradual reduction in adult smoking as the policy works to reduce tobacco use initiation among children and adolescents.²
- Although increasing the tobacco sale age to 21 would directly pertain to 18- to 20-year olds, the greatest impact of the policy would be among adolescents aged 15-17 who would have a harder time passing for legal age and obtaining cigarettes from their older friends and classmates.
- 18-, 19-, and 20-year olds are highly unlikely to quit tobacco immediately as a result of this policy. This is because tobacco is a highly addictive product and the majority of tobacco users have difficulty quitting. As a result, this population will continue to access and consume tobacco products even if they are blocked at retail by age restrictions. Unlike those under 18, 18-20 year olds are much more likely to have access to social sources who are of legal age and can purchase tobacco products for them. Further, we know from experience that despite the current law banning sales to individuals under the age of 18, some youth are still able to purchase tobacco products. We would expect similar activity when the age of sale is changed to 21.

- According to national data, tobacco consumption by 18- to 20-year olds is a very small share of total consumption in a state. 18- to 20-year olds account for only 2.1 to four percent of total cigarette consumption.³ Young people consume fewer tobacco products than older tobacco users, in large part because they have less disposable income and in part because they smoke less.⁴

Changes in normative behavior are gradual. While the policy begins working immediately to reduce access to tobacco products among youth and young adults, declines in smoking prevalence will occur over a longer period. The IOM did not predict the policy's impact on smoking declines among 18-20 year olds, but found that raising the tobacco sale age to 21 will reduce the overall adult smoking rate by about 12 percent over the long-term. This reduction is based on youth who are prevented from ever starting to smoke and who remain non-smokers into adulthood.

A more conservative assumption of smoking declines is warranted in the short-term. If we were to assume that the smoking prevalence among 18- to 20-year olds could be reduced by 6 percent in the short-term (half of the long-term estimate of 12 percent) and that 18-20 year olds consume 4 percent of cigarettes, we would estimate that the fiscal impact would be approximately one-quarter of one percent reduction in excise tax revenue over the first five years total.^{*} The fiscal impact would be even less if 18-20 year olds consumed a smaller share of cigarettes sold in the state.

Raising the Tobacco Sale Age Will Help Save Lives

The IOM report concluded that raising the tobacco sale age to 21 will have a substantial positive impact on public health and save lives.⁵ The report estimates reductions in youth tobacco use initiation based on a thorough literature review and expert panel consensus.

The IOM finds that raising the tobacco sale age will:

- significantly reduce the number of adolescents and young adults who start smoking;
- reduce smoking-caused deaths, and
- immediately improve the health of adolescents, young adults and young mothers who would be deterred from smoking, as well as their children.

More specifically, the report predicts that raising the minimum age for the sale of tobacco products to 21 will, over time, reduce the smoking rate by about 12 percent and smoking-related deaths by 10 percent, which translates into 223,000 fewer premature deaths, 50,000 fewer deaths from lung cancer, and 4.2 million fewer years of life lost. The report also predicts that increasing the sale age for tobacco will reduce smoking-related maternal and child health outcomes like low birth weight, pre-term births, and SIDS deaths.

Tobacco Use Exerts an Enormous Public Health and Economic Burden 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 in Michigan.⁶ Virtually all of them started using tobacco before age 21.⁷ Each year, 34,700 Michigan kids try their first cigarette; and another 5,800 additional kids become new regular, daily smokers.⁸ Tobacco use is known to cause cancer, heart disease and respiratory diseases, among other serious health problems.⁹

In addition to tobacco's impact on health and well-being, tobacco use takes a huge financial toll on the economy. The Centers for Disease Control and Prevention (CDC) estimates that in Michigan, tobacco use costs an estimated \$4.59 billion in health care costs *each year*, including approximately \$1.36 billion in state Medicaid expenditures.¹⁰ Additionally, productivity losses in Michigan total \$4.78 billion annually—and that total does not even include business losses from cigarette breaks, increased sick days, or from workers being less productive when on the job because of smoking caused health problems.¹¹

^{*} The 4 percent share of consumption multiplied by the 6 percent reduction in smoking prevalence, implying a reduction of 0.24 percent. If we were to assume a 12 percent reduction in smoking prevalence and a 4 percent share of consumption, that would still be only a 0.48 percent reduction in excise tax revenue.

These huge burdens on the state show the urgent need to implement evidence-based policies to reduce tobacco use. Increasing the tobacco sale age to 21 will help reduce smoking and save lives while having minimal fiscal impact on state revenues.

Reducing Tobacco Use Is a Smart Investment

As stated above, tobacco use costs Michigan \$4.59 billion in health care costs each year.¹² Preventing Michigan kids from becoming addicted smokers would secure millions of dollars in future health care cost savings. In Michigan, for each one percentage point decline in youth and adult smoking rates, future health care costs in Michigan would be reduced by about \$961.5 million.¹³ The long-term savings also directly reduce state Medicaid program expenditures.

And, money not spent on tobacco products by 18-, 19- and 20-year-olds is available to be spent on other consumer items. Spending on tobacco products does not simply disappear from the local economy. It can be redirected to other products purchased in-state.

Reducing smoking rates delivers a terrific return on investment, saving health care dollars by reducing the huge financial burden that tobacco use imposes on governments, businesses and families. Implementing a policy that will reduce tobacco use is a sound fiscal move as well as sound health policy that can pay tremendous dividends by reducing the very diseases that cost the most to treat.

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¹ This calculation relies on two assumptions: 1) that 18-20 year olds consume 4 percent of tobacco products, based on the upper range of national estimates of 2 to 4 percent for this age group, (see footnote 3), and 2) a 6 percent decline in smoking by 18-20 year olds over the first five years of the policy, which is derived from halving the IOM's long-term estimate of declines in smoking rates for all adults ages 18 and over.

²Institute of Medicine, *Public Health Implications of Raising the Minimum Age of Legal Access to Tobacco Products*, Washington, DC: The National Academies Press, 2015. <http://www.nationalacademies.org/hmd/Reports/2015/TobaccoMinimumAgeReport.aspx>.

³ Chaloupka, F., Analysis of data from the Tobacco Use Supplement to the Current Population Survey, 2010-2011(TUS-CPS) and Winickoff, JP, et al., "Retail Impact of Raising Tobacco Sales Age to 21 Years," *American Journal of Public Health* 104(11):e18-e21, 2014.

⁴ The proportion of smokers that smoke daily rises with age, see: NSDUH, 2002-2014 and the proportion of smokers that on average smokes ½ pack or more per day rises with age, see: Institute of Medicine, *Public Health Implications of Raising the Minimum Age of Legal Access to Tobacco Products*, Washington, DC: The National Academies Press, 2015,

<http://www.nationalacademies.org/hmd/Reports/2015/TobaccoMinimumAgeReport.aspx>, based on 2012 NSDUH data; National estimates of tobacco consumption by 18 to 20 years range from roughly 2 percent to 4 percent, Chaloupka, F., Analysis of data from the Tobacco Use Supplement to the Current Population Survey, 2010-2011(TUS-CPS) and Winickoff, JP, et al., "Retail Impact of Raising Tobacco Sales Age to 21 Years," *American Journal of Public Health* 104(11):e18-e21, 2014.

⁵Institute of Medicine, *Public Health Implications of Raising the Minimum Age of Legal Access to Tobacco Products*, Washington, DC: The National Academies Press, 2015, <http://www.nationalacademies.org/hmd/Reports/2015/TobaccoMinimumAgeReport.aspx>.

⁶ U.S. Department of Health and Human Services. *The Health Consequences of Smoking: 50 Years of Progress. A Report of the Surgeon General*, 2014; CDC, *Best Practices for Comprehensive Tobacco Control Programs—2014*, http://www.cdc.gov/tobacco/stateandcommunity/best_practices/.

⁷ National data show that about 95 percent of adult smokers begin smoking before they turn 21, and a substantial number of smokers start even younger—about 80 percent of adult smokers first try smoking before age 18. Calculated based on data in the National Survey on Drug Use and Health, 2014, <http://www.icpsr.umich.edu/icpsrweb/ICPSR/series/64>

⁸ Estimate based on data from SAMHSA, HHS, *Results from the 2014 National Survey on Drug Use and Health, NSDUH: Summary of National Findings*, 2014. <http://www.samhsa.gov/data/sites/default/files/NSDUH-DeTABS2014/NSDUH-DeTABS2014.pdf>.

⁹ HHS. *The Health Consequences of Smoking: 50 Years of Progress. A Report of the Surgeon General*, 2014.

¹⁰ CDC, *Best Practices for Comprehensive Tobacco Control Programs* 2014,

http://www.cdc.gov/tobacco/stateandcommunity/best_practices/index.htm; CDC, Smoking Attributable Mortality, Morbidity and Economic Costs SAMMEC, <http://apps.nccd.cdc.gov/sammecc/>; CDC, State Data Highlights 2006 [and underlying CDC data/estimates],

http://www.cdc.gov/tobacco/data_statistics/state_data/data_highlights/2006/index.htm; State Medicaid program expenditures are before any federal reimbursement. Health care costs in 2009 dollars.

¹¹ CDC, *State Data Highlights 2006* [and underlying CDC data/estimates], in 2009 dollars. See also, CDC, Smoking Attributable Mortality, Morbidity and Economic Costs, SAMMEC, <http://apps.nccd.cdc.gov/sammecc/>.

¹² CDC, *Best Practices for Comprehensive Tobacco Control Programs* 2014,

http://www.cdc.gov/tobacco/stateandcommunity/best_practices/index.htm

¹³ Estimates based on Hodgson, TA, "Cigarette Smoking and Lifetime Medical Expenditures," *Milbank Quarterly* 70(1), 1992 [average smoker's lifetime health care costs are \$21,000 (in 2009 dollars) more than nonsmoker's; average lifetime health care cost savings for adults who quit are approximately \$11,000 (in 2009 dollars)]. For more detail, see the TFK factsheet *Health Costs of Smokers vs. Former Smokers vs. Non-Smokers And Related Savings From Quitting*, <http://tobaccofreekids.org/research/factsheets/pdf/0327.pdf>.