



November 8, 2021

Dear Members of Congress:

My name is Michael Pesko and I am an Associate Professor in the Department of Economics at Georgia State University ([website](#)). I have a \$1.4 million dollar grant from the National Institutes of Health to conduct e-cigarette policy evaluation research, including evaluation of e-cigarette taxes. I do *not* receive funding from the tobacco industry, or related groups.

I write to share what I have learned about e-cigarette taxes from my NIH-funded research. These scientific opinions are co-signed by other highly-regarded health economists that I have co-authored this research with.

The version of the Build Back Better (BBB) Act released on Nov. 3 ([link](#), see section 138520) and currently under consideration by the House of Representatives would raise e-cigarette taxes to a level comparable to cigarette taxes, and exceeding cigarette taxes for some e-cigarette products. The Act does not change the cigarette tax rate.

[My NIH-funded research spanning ten peer-reviewed published papers evaluating e-cigarette policies](#), and complementary work from other researchers, shows that across an array of analytic approaches, e-cigarettes and other nicotine vaping products function as what economists call ‘substitutes’ for conventional cigarettes. In practical terms, if e-cigarettes and cigarettes are substitutes, then raising the price of one on average leads people to increase use of the other. Given extensive peer-reviewed evidence indicating that these products are substitutes, an unintended but inevitable effect of increasing taxes on e-cigarettes is to increase cigarette use. Given that cigarettes are believed to be substantially more harmful than e-cigarettes, this effect on cigarette use is concerning.

Our economic evaluations of existing state and county e-cigarettes taxes find that increasing e-cigarette taxes to parity with the cigarette tax rate will sizably increase cigarette use across teens, adults, and pregnant women, compared to taxing tobacco products differentially in proportion to their health risk. Across various papers, we find several concerning consequences of large e-cigarette tax increases:

- Simulating the current bill’s e-cigarette tax on teen tobacco use indicates that this policy would reduce teen e-cigarette use by 2.7 percentage points, but that 2 in 3 teens who do not use e-cigarettes due to the tax would smoke cigarettes instead ([study A](#)). This would result in approximately a half million extra teenage smokers overall. This finding that teens substitute to cigarettes in response to e-cigarette taxes has also been documented using National Youth Tobacco Survey data ([study B](#)).
- The tax would raise the number of daily adult cigarette smokers by 2.5 million nationally and reduce adult e-cigarette users by a similar number ([study C](#)).
- For every e-cigarette pod eliminated by an e-cigarette tax, more than 5.5 extra packs of cigarettes are sold instead ([study D](#)).

- For every three pregnant women that do not use e-cigarettes due to an e-cigarette tax, one smokes cigarettes instead ([study E](#)).

A wide array of research suggests that this boost in cigarette use as a result of large e-cigarette tax increases would significantly increase overall tobacco-related death and disease.

E-cigarettes have now been available in the U.S. marketplace for over a decade, and much is known about their danger relative to cigarettes. A National Academies of Sciences, Engineering, and Medicine report says that [e-cigarettes are not without risk, but they are likely to be far less harmful than cigarettes](#). Despite a common misconception to the contrary, nicotine alone (such as in nicotine gum and e-cigarettes) is not carcinogenic. While high nicotine exposures have been found to harm the [developing brain of rodents, this has not been documented in human brains](#), nor has the harmful effect been compared to other substances such as caffeine, alcohol, or Tetrahydrocannabinol (THC). A recent Cochrane systematic review—such reviews are regarded as among the best in the world— finds that [e-cigarettes are more effective than nicotine replacement therapy in helping adults to quit smoking](#).

Despite their potential for harm reduction, e-cigarettes have been met with significant skepticism. In part this skepticism is driven by the substantial and worrying increase in underage e-cigarette use. Fortunately, concerns that e-cigarettes may act as a ‘gateway’ to cigarettes have not materialized: youth cigarette use is at historic lows. In 2009, 19.5% of youth used cigarettes and a [Healthy People 2020 goal](#) of a 16.0% youth cigarette use rate was announced by government scientists and public health officials. By 2019, youth cigarette use was at 6%, surpassing the 2020 goal by 386%, likely in large part due to e-cigarettes.

While not the topic of our research in particular, smokeless tobacco products are also substantially safer than combustible tobacco products. Given this risk differential, we suggest that smokeless tobacco products should similarly be taxed at lower rates than more lethal combustible products, to incentivize switching to safer forms of tobacco. The current version of the BBB imposes a high tax on smokeless nicotine pouch products that is opposite of this goal.

Policymakers are understandably worried about youth e-cigarette use. Yet over-regulating e-cigarettes could cause substantial harm. One option for Congress to consider that could reduce youth e-cigarette use (and other tobacco product use), without discouraging use of a potential life-saving product for adult smokers, is improving underage undercover buyer inspection programs of retailers. Retailers are a major source of e-cigarettes for minors today. I have found in prior work that the [Food and Drug Administration’s \(FDA\) current underage undercover buyer inspection program is inadequate](#). In particular, youth decoys are prohibited from mis-stating their age and using false identification – two tactics commonly used by actual underage youth attempting to buy tobacco products. Hence, targeted retailers can easily evade FDA underage inspectors. If Congress improved the youth inspection program by requiring use of these methods, it could significantly reduce youth access to all tobacco products (including e-cigarettes), hence yielding significant public health benefit.

Scientific evidence supports e-cigarettes providing immediate benefits as a harm reduction product. Overall, my scientific opinion is that raising taxes on e-cigarettes and smokeless tobacco products to levels equivalent to cigarettes will increase cigarette use across all populations and cause significant public health harm.

Please let me know if you have any questions.

Sincerely,



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