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Taxing tobacco and e-cigarettes at same rate will harm young users, new study finds

- **New laws that would apply the same tax rate to both e-cigarettes and cigarettes may have adverse public health consequences as substitution occurs from e-cigarette use to cigarette use**
- **Study simulates that doubling e-cigarette taxes would decrease e-cigarette use by 12% but increase cigarette use by 8% among youths**

Over the past decade, rising youth use of e-cigarettes and other electronic nicotine delivery systems (ENDS) has prompted aggressive regulation by state and local governments. Ten states and two large countries adopted ENDS taxes between 2010 and 2019, and other federal, state, and local policies are pending.

The issue is the subject of intense debate among health policy experts. On one hand, products such as e-cigarettes that pose health risks to consumers are often taxed in an effort to reduce their use. On the other hand, vaping can be an effective tool to help people quit smoking traditional cigarettes. With [scientific panels](#) and [surveys of public health experts](#) suggesting that e-cigarettes pose just a fraction of the health risks of cigarettes, the question arises whether aggressive taxation of e-cigarettes could pose unintended harm to public health by increasing use of the unhealthier alternative of cigarette smoking.

So, you might be wondering — what does the evidence say about the effectiveness of these public health measures?

A new National Institutes of Health-funded study by nine health economists, including [Charles Courtemanche](#), associate professor of economics and director of the [Institute for the](#)

[Study of Free Enterprise \(ISFE\)](#) at the University of Kentucky’s Gatton College of Business and Economics, shows that the implementation of existing ENDS taxes induced substitution towards more lethal combustible tobacco products among teens.

Using large-scale retrospectively collected survey data of youth from Monitoring the Future and the Youth Risk Behavior Surveillance System – totaling 800,000 observations from 2011 to 2019 – the economists developed models to estimate the effect of e-cigarette taxes on four outcomes: e-cigarette use, combustible tobacco use, source of e-cigarettes (e.g., purchasing online, purchasing from brick-and-mortar retailers), and perceived risk of e-cigarette use.

Averaging effects across the two data sources, the authors simulate that doubling the current rate of e-cigarette taxes used by state and local governments would reduce youth e-cigarette use by 12 percent while increasing youth cigarette use by 8 percent.

These findings – showing large substitution towards cigarettes as a result of e-cigarette taxes – matches those from studies of other populations including adults and pregnant women.

“This study is important because of its focus on youth,” said Courtemanche. “Even though the evidence is mounting that e-cigarette taxes impede smoking cessation efforts among adults, this could potentially be ‘worth it’ if these taxes are effective in preventing teens from starting to use tobacco products. Unfortunately, our results suggest that cracking down on e-cigarettes largely just shifts teen tobacco use to other, possibly more dangerous forms, just as it does with adults.”

Co-authors of the study, “Intended and Unintended Effects of E-cigarette Taxes on Youth Tobacco Use” are Rahi Abouk (William Patterson University), Charles Courtemanche (University of Kentucky), Dhaval Dave (Bentley University), Bo Feng (Georgia State University), Abigail S. Friedman (Yale School of Public Health), Johanna Catherine Maclean (Temple University), Michael Pesko (Georgia State University), and Joseph Sabia and Samuel Stafford (San Diego State).