University of Kentucky

Gatton College of Business and Economics

Institute for the Study of Free Enterprise



Study examines effect of e-cigarette minimum legal sales age on tobacco use among American youth

- States established minimum legal sale age (MLSA) for e-cigarettes from 2010 up until a federal law was passed in 2016
- The staggered adoption of these policies creates a natural experiment that allows us to better understand e-cigarettes' effect on tobacco use
- Estimates imply that e-cigarette MLSAs may reduce lifetime cigarette use by 25% but increase daily cigarette or cigar use by 35%

To date, it is unclear whether e-cigarettes present an overall threat or boost to public health in the US. To determine their potential for benefit or harm, a key question is how they affect the use of combustible tobacco products. Michael Pesko, an Associate Professor of Economics at the Andrew Young School of Public Studies at Georgia State University and recipient of an Institute for the Study of Free Enterprise research grant, addresses this issue by applying innovative and state-of-the-art econometrics to analyze how MLSAs affect e-cigarette and combustible tobacco use among youths.

Using data from the National Tobacco Youth Survey (NTSY), Pesko estimates that while MLSAs have a public health benefit of reducing e-cigarette use among youths, it comes at the public health cost of increased combustible tobacco use. The FDA must weigh this tradeoff when assessing federal level MLSA legislation.

Pesko comments, "In the United States, the MLSA for all tobacco (including ecigarettes) is now 21 years of age. Results from this study suggest that raising MLSAs for combustible tobacco, but leaving them lower for e-cigarettes, could have public health benefit

over raising both ages to 21."

Speaking to the generalizability of his results to countries without MLSAs, he continues, "the current study would therefore provide evidence on likely effects of implementing e- cigarette MLSAs in places without them: lower youth e-cigarette initiation but at the expense of higher regular combustible tobacco use rates."