



**IT'S TIME LAWMAKERS TAKE A STAND AGAINST YOUTH USE OF
ELECTRONIC CIGARETTES AND OTHER NICOTINE PRODUCTS WITH THEIR
VOTE FOR HB0252 - ELECTRONIC CIGARETTE AND OTHER NICOTINE PRODUCT AMENDMENTS**

THE PROBLEM

➤ **E-CIGARETTE USE BY UTAH YOUTH IS AT EPIDEMIC PROPORTIONS AND INCREASING EXPONENTIALLY.**

- Between 2013 and 2017 the percentage of students in Utah grade 8 through 12 using e-cigarettes doubled, with 11.2% (24,500) students reported as being current (DAILY) users of these products.^{1,2}
- A recent national survey that includes data for Utah youth indicates that between 2017–2018, current e-cigarette use among high school students increased by 78%, and by 48% for middle school students.³

➤ **E-CIGARETTE SUBSTANCE (E-JUICE) CONTAINS CHEMICALS HARMFUL TO YOUTH.**

- Harmful chemicals associated with bronchiolitis obliterans (popcorn lung), which is an irreversible and potentially fatal lung disease, are present in many types of flavored e-cigarettes, particularly those with flavors like fruit and candy that may appeal to young users.⁴

➤ **MOST E-CIGARETTES CONTAIN NICOTINE.**

- JUUL, which is by far the most popular vaping system among Utah youth and youth nationally contains high amounts of nicotine, with one JUUL pod (about 200 puffs) containing nicotine equivalent to one pack of cigarettes.⁵
- Other e-cigarettes and vaping systems contain amounts of nicotine equal to the nicotine consumed in 100 cigarettes.

➤ **E-CIGARETTES ARE A GATEWAY TO TOBACCO USE.**

- Research indicates that youth who use e-cigarettes are 4 times more likely to use cigarettes than are non-users of e-cigarettes, with an average of 37.5% of youth users ages 13-17 taking up cigarette use within two years of initiating e-cigarettes use.^{6, 7, 8, 9, 10}
- Considering research results, without intervention nearly 10,000 current Utah youth e-cigarette users will likely take-up cigarette use.¹¹

➤ **EACH UTAH YOUTH E-CIGARETTE USER WHO TAKES UP TOBACCO WILL CONTRIBUTE TO TOBACCO-RELATED HEALTH CARE AND ECONOMIC COSTS, THE PRICE OF WHICH IS PAID BY ALL UTAHNS, WHETHER THEY USE TOBACCO OR NOT.**

- Each youth e-cigarette user who takes up tobacco will ultimately contribute \$3,036 annually to the current \$542 M yearly price tag for tobacco-related health care, which is paid by all Utahns via increased health insurance premiums, taxes to fund tobacco care in Medicaid, tobacco-related increases in costs of medical care generally, and charity care; and \$2,321 each year to current annual tobacco-related productivity costs of \$355.6 M.^{12, 13}

➤ **INCREASING THE PRICE OF E-CIGARETTES VIA ASSESING AN EXCISE TAX IS THE MOST EFFECTIVE TOOL TO DECREASE YOUTH E-CIGARETTE USE.**

- HB00252 will levy an excise tax of 86% of manufacturer's price on e-cigarette liquid and all other nicotine products regulated by the bill, which will increase the price of those products.
- The micro-economic theory of price elasticity of demand (PED) indicates that since youth users of e-cigarettes are not highly addicted to nicotine and they have little disposable income, 6.5% of them will quit for every 10% increase in price for the product.¹⁴
- Reportedly, most Utah youth e-cigarette users purchase e-cigarette and vaping paraphernalia and liquids from convenience and grocery stores, tobacco and e-cigarette shops, the youth black market, or from adults.¹⁵
- **PED indicates that since they are purchasers, nearly 14,000 of the 24,500 Utah e-cigarette users ages 13-17 will quit e-cigarettes almost immediately as a result of levying the excise tax of 86% of manufacturers sales price (MSP) on e-cigarettes.**¹⁶
- Price increases will be less impactful to adult e-cigarette use since most adults are dual users of e-cigarettes and tobacco products and as a result, they have a much stronger dependence on / addiction to nicotine.^{17, 18}

➤ **SIGNIFICANT BENEFITS WILL ACCRUE FOR MOST UTAHNS AS A RESULT OF PLACING AN EXCISE TAX ON E-CIGARETTES.**

- Over 5,000 of the nearly 10,000 Utah youth ages 13-17 who have been or may be compelled to regularly use tobacco as a result of e-cigarette use will quit or avoid tobacco use as a result of quitting e-cigarettes.¹⁹
- Tobacco related health-care and productivity costs, which are typically paid by Utah tax payers and business owners who do not use e-cigarettes or tobacco, will decrease by nearly \$30,000,000 annually.²⁰
- At minimum, nearly \$24,000,000 in annual net tax revenue will result from levying an excise tax on e-cigarettes of 86% of manufacture's sales price, a portion of which could be directed to e-cigarette regulation enforcement and youth cessation and avoidance programs.²¹

¹ State of Utah Department of Human Services, Division of Substance Abuse and Mental Health. **Student Health and Risk Prevention Survey**, <http://dsamh.utah.gov/data/sharp-student-use-reports/> 2017 (Feb. 2017).

² Utah State Office of Education. **Data Reports – Enrollment and Demographics**. <http://www.schools.utah.gov/data/Reports/Enrollment-Demographics.aspx> (October 2017).

³ Cullen KA, Ambrose BK, Gentzke AS, Apelberg BJ, Jamal A, King BA. Notes from the Field: **Use of Electronic Cigarettes and Any Tobacco Product Among Middle and High School Students — United States, 2011–2018**. MMWR Morb Mortal Wkly Rep 2018; 67:1276–1277. DOI: <http://dx.doi.org/10.15585/mmwr.mm6745a5>.

⁴ Joseph G. Allen, Skye S. Flanigan, Mallory LeBlanc, Jose Vallarino, Piers MacNaughton, James H. Stewart, and David C. Christiani, **Environmental**

Health Perspectives, <http://ehp.niehs.nih.gov/wp-content/uploads/advpub/2015/12/ehp.1510185.acco.pdf> (Feb. 2016).

⁵ United States Department of Health and Human Services Centers for Disease Control and Prevention. **Sales of JUUL e-cigarettes skyrocket,**

posing danger to youth. <https://www.cdc.gov/media/releases/2018/p1002-e-Cigarettes-sales-danger-youth.html>.

⁶ Jessica L. Barrington-Trimis, PhD, Robert Urman, PhD, Kiros Berhane, PhD, Jennifer B. Unger, PhD, Tess Boley Cruz, PhD, Mary Ann Pentz, PhD, Jonathan M. Samet, MD, Adam M. Leventhal, PhD, Rob McConnell, MD. **E-Cigarettes and Future Cigarette Use**. <http://pediatrics.aappublications.org/content/pediatrics/early/2016/06/10/peds.2016-0379.full.pdf>.

⁷ Jieming Zhong, Shuangshuang Cao, Weiwei Gong, Fangrong Fei, and Mein Wang. **Association of Electronic Cigarette Use with Initiation of Combustible Tobacco Product Smoking in Early Adolescence**. JAMA 2015; 314:700–707, <https://www.acc.org/latest-in-cardiology/journal-scans/2015/08/18/16/12/association-of-electronic-cigarette-use-with-initiation>.

⁸ Richard Miech, Megan E. Patrick, Patrick M. O'Malley, and Lloyd D. Johnston. **E-cigarette Use as a Predictor of Cigarette Smoking: Results from a One-Year Follow up of a National Sample of 12th Grade Students**. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5545162/>.

- ⁹ Brian A. Primack, Samir Soneji, Michael Stoolmiller, Michael J. Fine, James D. Sargent. **Progression to Traditional Cigarette Smoking After Electronic Cigarette Use Among US Adolescents and Young Adults.** *JAMA Pediatrics*, 2015; 1 DOI: 10.1001/jamapediatrics.2015.1742
- ¹⁰ Leventhal AM , Strong DR Kirkpatrick MG, Unger JB, Sussman S, Riggs NR, Stone MD, Khoddam R, Samet JM, Audrain McGovern. **Association of Electronic Cigarette Use with Initiation of Combustible Tobacco Product Smoking in Early Adolescence.** <https://www.ncbi.nlm.nih.gov/pubmed/26284721>.
- ¹¹ Ibid.
- ¹² 11 Xu X, Bishop EE, Kennedy SM, Simpson SA, Pechacek TF. **"Annual Healthcare Spending Attributable to Cigarette Smoking: An Update.** *American Journal of Preventive Medicine* 2014;48(3):326–33. Web. 21 Oct 2016.
- ¹³ Ibid.
- ¹⁴ Frank J. Chaloupka, Rosalie Liccardo Pacula (1998). **The Impact of Price on Youth Tobacco Use.** *Smoking and Tobacco Control Monograph* No. 14 (Dec. 2015).
- ¹⁵ Utah Department of Health Tobacco Prevention and Control Program. **Youth E-Cigarette Use, 2015 Utah Data Update.** <http://le.utah.gov/interim/2016/pdf/00000733.pdf> (February 6, 2017).
- ¹⁶ Economic Concepts.com. **Factors Determining Price Elasticity of Demand.** http://economicsconcepts.com/factors_determining_price_elasticity_of_demand.htm (Feb. 2016).
- ¹⁷ Ibid
- ¹⁸ Utah Department of Health, Tobacco Prevention and Control Program. **Electronic Cigarettes in Utah.** <http://www.tobaccofreeutah.org/pdfs/e-cig%20summary%202015.pdf> (Feb. 2, 2017).
- ¹⁹ See Appendix A.
- ²⁰ Ibid.
- ²¹ Utah State Legislature, Office of the Fiscal Analyst. **Fiscal Note H.B. 439, 2017 General Session, Electronic Cigarette and Other Nicotine Product Amendments.** <https://le.utah.gov/lfa/fnotes/2017/HB0439.fn.pdf>.

APPENDIX A

Benefits of Levying an E-cigarette Excise Tax as a Percentage of Manufacturers Sales Price

Excise Tax Rate as percent of manufactures sales price	Current # of Utah youth ages 13-17 who regularly use e-cigarettes	# of current Utah youth regular e-cigarette users ages 13-17 who will quit e-cigarette use due to increased product price resulting from levy of excise tax	# of Utah youth ages 13-17 who currently do or likely will use tobacco as a result of regular e-cigarette use	# of Utah youth ages 13-17 who will quit or avoid tobacco use as a result of quitting regular e-cigarette use	# of Utah youth ages 13-17 who currently do or likely will use marijuana as a result of regular e-cigarette use	# of Utah youth ages 13-17 who will quit or avoid marijuana use as a result of quitting regular e-cigarette use	Annual tobacco-related health care and productivity costs for current # of regular e-cigarette users ages 13-17 who do or likely will use tobacco	Annual tobacco-related health care and productivity costs for remaining # of regular e-cigarette users ages 13-17 who do or likely will use tobacco following assessment of e-cigarette excise tax	Savings in tobacco-related health care and productivity costs due to the reduced # of tobacco users ages 13-17 following assessment of e-cigarette excise tax
86% of MSP	24,500	13,696	9,525	5,473	7,350	4,109	\$51,025,425	\$21,704,890	\$29,320,535
76% of MSP	24,500	12,103	9,525	4,876	7,350	3,631	\$51,025,425	\$24,904,023	\$26,121,402
66% of MSP	24,500	10,511	9,525	4,279	7,350	3,153	\$51,025,425	\$28,103,157	\$22,922,268
56% of MSP	24,500	8,918	9,525	3,682	7,350	2,675	\$51,025,425	\$31,302,290	\$19,723,135
46% of MSP	24,500	7,326	9,525	3,085	7,350	2,198	\$51,025,425	\$34,501,424	\$16,524,001
36% of MSP	24,500	5,733	9,525	2,487	7,350	1,720	\$51,025,425	\$37,700,557	\$13,324,868
29% of MSP*	24,500	4,618	9,525	2,069	7,350	1,385	\$51,025,425	\$39,939,951	\$11,085,474

* Economists and tobacco prevention and control experts indicate that excise taxes of 30% or less of product price are ineffective as manufacturers and retailers can decrease price through discounts and couponing and negate the efficacy of the tax.