



FACT Vs FICTION REGARDING E-CIGARETTES AND AN E-CIGARETTE TAX IN UTAH

FICTION: *Vapers claim that vaping (e-cigarette use) is “at least 95% safer than combustible tobacco use,” citing a recently released study in Great Britain as proof.*

FACT: *There is no conclusive, evidence-based, scientific data indicating that vaping is safer than combustible tobacco use; in fact, independent, evidence-based, scientific data points to the contrary. To these points:*

1. The Great Britain study used by vapers as their proof of reduced harm with vaping has been **discredited** by the *Lancet*, which is the world's leading independent general medical journal. The *Lancet* is recognized as one of the most prestigious medical journals in the world.¹

While the *Lancet* reports many concerns about the study, including that the study was methodologically weak; their greatest concern is that **the chief scientific advisor to the study is a paid consultant and spokesperson for one of the largest e-cigarette manufactures and distributors in Europe.**²

2. While more study needs to be completed, recent research by independent scientists in the United States indicates:
 - A. 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 smokers.³
 - B. A recent meta-analysis of more 800 research studies conducted by the National Academies of Science, Engineering and Medicine concludes that little is known about the long-term effects of e-cigarette use, and there is little data to assess the impact on cancer and heart disease risk. The long-term effects of e-cigarette use on morbidity and mortality are not yet clear.⁴

FICTION: *Vapers claim that vaping (e-cigarette use) is an effective means of tobacco cessation.*

FACT: *There is no conclusive, evidence-based data indicating vaping is an effective tobacco cessation tool. To this point:*

1. A recent meta-analysis of more 800 research studies conducted by the National Academies of Science, Engineering and Medicine indicate there is very little data from randomized controlled trials indicating that e-cigarettes may be effective aids to promote smoking cessation.⁵

FICTION: *Vapers claim that “imposing a punitive tax” on e-cigarettes will “force adult consumers back to smoking tobacco.”*

FACT: *Conclusive, evidenced-based, scientific study substantiates that the majority of those addicted to nicotine are significantly less likely to quit the use of products that provide them nicotine in response to placing a tax on those products. To this point:*

1. Statistically significant and evidence-based research conducted in Utah indicate that nearly 2/3 (66%) of Utah adults who currently use e-cigarettes also smoke conventional cigarettes.⁶

2. Dual use of e-cigarettes and cigarettes is associated with higher levels of nicotine dependence and ultimately addiction.⁷
3. Evidence-based economic research indicates that the more addicted a person is, the **less likely** they are to quit use of products they perceive as necessary to serve that addiction as a result of price increases for that product.⁸

FICTION: Vapers claim that taxing e-cigarettes is not an “effective method” to get youth to quit e-cigarette use.

FACT: Conclusive, evidence-based, scientific study, along with real-time data collected following tax increases on tobacco products substantiate that youth are very sensitive to the price of tobacco products and a significant number DO quit e-cigarette use in response to price increases resulting from setting or increasing taxes on tobacco products. To this point:

1. Price Elasticity of Demand, which is an evidence-based economic model, indicates that for every 10% increase in the price of e-cigarettes 6.5% of youth will quit e-cigarette use. That equates to nearly **14,000 of the 24,500 Utah e-cigarette users ages 13-17 quitting due to the tax called for in HB0252.**⁹
2. In Utah, twelve months after the 2010 51% increase in the tax for smokeless tobacco products, **33% of youth age 12 - 17 who in 2009 had reported being regular users of those products had quit their use in response to the tax increase;** which is a quit rate within .15% of the rate projected by the Price Elasticity of Demand model.¹⁰

FICTION: Vapers claim that “imposing a punitive tax” on e-cigarettes will “cause retail electronic cigarette and liquid manufacturers to close down and will place Utah residents on the unemployment line.”

FACT: These are anecdotal projections with no basis in fact or precedence. To this point:

1. Similar arguments were made in 2010 as the legislature considered the increase in cigarette and tobacco taxes. Several stand-alone tobacco shops very similar in size and scope to e-cigarette stores argued they would have to close within a short time after the tax would take effect. **Four of those who argued most vociferously (the Tinderbox, Jeanie’s Smoke Shop, Timberline and the Hungry Trout) are all open today and all have flourished and expanded during the past nine years since the increase took effect.**
2. During the past 9 years since the cigarette and tobacco tax increase became effective, the smoke shop industry has exploded in Utah with more than 300 stand-alone stores now located along the Wasatch Front (from Ogden to Provo).¹¹

END NOTES

¹The Lancet, *E-cigarettes: Public Health England’s evidence-based confusion*, <http://thelancet.com/journals/lancet/article/PIIS0140-6736%2815%2900042-2/fulltext> (Feb. 2016).

²Ibid.

³Joseph 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).

⁴ <https://www.tobaccofreekids.org/assets/factsheets/0397.pdf> (Feb 2019).

⁵National Academies of Sciences, Engineering, and Medicine; Health and Medicine Division; Board on Population Health and Public Health Practice; Committee on the **Review of the Health Effects of Electronic Nicotine Delivery Systems**; Kathleen Stratton, Leslie Y. Kwan, and David L. Eaton, Editors (Jan. 2018).

⁶Utah Department of Health, Tobacco Prevention and Control Program, **Electronic Cigarettes in Utah**, <http://www.tobaccofreeutah.org/pdfs/e-cig%20summary%202015.pdf> (Feb. 2017).

⁷The Alliance for Academic Internal Medicine, **Electronic Cigarettes – A Narrative for Clinicians**, *The American Journal of Medicine*, [http://www.amjmed.com/article/S0002-9343\(15\)00165-5/fulltext](http://www.amjmed.com/article/S0002-9343(15)00165-5/fulltext) (Feb. 2016).

⁸ Economic Concepts.com, **Factors Determining Price Elasticity of Demand**,

http://economicsconcepts.com/factors_determining_price_elasticity_of_demand.htm (Feb. 2016).

⁹ Frank J. Chaloupka, Rosalie Liccardo Pacula (1998). **"The Impact of Price on Youth Tobacco Use."** Smoking and Tobacco Control Monograph No. 14 (Dec 2015).

¹⁰ U.S. Centers for Disease Control and Prevention, **Tobacco Control State Highlights 2012**,

http://www.cdc.gov/tobacco/data_statistics/state_data/state_highlights/2012/states/utah/index.htm (Feb. 2016).

¹¹ Utah Yellow Pages, http://www.yellowpages.com/search?search_terms=smoke+shop&geo_location_terms=salt+lake+city (Feb. 2016).
