

## THE UTAH DEPARTMENT OF HEALTH'S PROPOSED AMENDMENT 53559 TO ADMINISTRATIVE RULE R384-415 WILL PROTECT UTAH'S YOUTH AND TAXPAYING PUBLIC

- Nearly 31,000 (12.4%) of Utah youth ages 13 to 18 use vaping products on a regular basis.<sup>1,2</sup>
- JUUL with high nicotine levels is the e-cigarette brand preferred by 25.4% of middle and high school students.<sup>3</sup>
- Researchers estimate that JUUL, which contains the nicotine equivalent of a pack of 20 cigarettes in each 5% pod, is three or more times as powerful as most e-cigarettes on the market.<sup>4</sup>
- The rise in e-cigarette use by adolescents is attributed to JUUL and products like JUUL because they can be used discreetly and have a high nicotine content.<sup>5</sup>
- An electronic cigarette with a higher concentration of nicotine has a greater likelihood of being more addictive.<sup>6</sup>
- Youth who are addicted to nicotine because of vaping are four times more likely to use lit tobacco than non-vapers.<sup>7</sup>
- Each youth e-cigarette user who takes-up lit tobacco use is subject to smoking related disease and ultimately will contribute 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, increases in costs of medical care generally, and costs of charity care.<sup>8</sup>
- Nearly 30% of all youth e-cigarette users ages 13-18 who were never-users of marijuana prior to taking-up e-cigarettes report heavy use of marijuana within one year after initiating e-cigarette use.<sup>9</sup>
- Each Utah youth e-cigarette user who takes-up marijuana use is subject to marijuana related physical and mental health concerns costly to themselves and all Utahns, including compromised memory, attention span, and inability to think clearly, making it difficult to concentrate, learn new things, and make sound decisions.
- Proposed Amendment 53559 to administrative rule R384-415 will prohibit the sale of prefilled electronic cigarettes or disposables with nicotine levels at or greater than 5% nicotine by weight, thus protecting youth and taxpayers by:
  - \* Shielding youth from access to high levels of nicotine which may decrease youth uptake of e-cigarettes.
  - \* Decreasing the probability of youth addiction to nicotine and lowering the prospect they will take up tobacco or marijuana use.
  - \* Limiting incidences of tobacco-related disease or marijuana-related physical and mental health conditions, thus decreasing the amount all taxpayers pay for tobacco and marijuana related care.

## FICTION VS FACT VS REGARDING VAPE INDUSTRY AND RETAIL MERCHANTS ARGUMENTS AGAINST PROPOSED AMENDMENT 53559

FICTION: The vape industry and retail merchants claim that prohibiting the sale of prefilled electronic cigarettes or disposables with nicotine levels at or greater than 5% nicotine by weight or exceeding 59 mg/ml will cause sales of small vape retailers and profit margins of not-small business that sell vape products to decrease.

FACT: Composition of the vape market in Utah along with terms set forth by proposed Amendment 53559 are such that prohibiting the sale of vape products with nicotine levels at or greater than 5% nicotine by weight or exceeding 59 mg/ml will not have a significant impact on overall sales or profit margins for small or not-small businesses that sell vape products. To these points:

1. The adult e-cigarette market in Utah is relatively small with 5.6% of adults ages 18 and older noted as regular e-cigarette users in 2020 (estimated at 115,000 adults).<sup>10</sup> Nationally and in Utah it has been found that most adult users use vape products with nicotine levels at or below 4% by weight.<sup>11</sup> Only 2% of adults (around 2,300 in the Utah market) have been found to use JUUL and products like JUUL with nicotine levels of 5% or higher.<sup>12</sup>

Since the bulk of vape market sales in Utah currently consists of products with nicotine levels close to levels that will be set by Amendment 53559 (not to exceed 3% nicotine by weight or 36mg/ml), it is likely that rather than quitting, a significant percentage of current users will switch to products with nicotine at that level, thus maintaining sales volumes close to those prior to adoption of the amendment.

It is estimated that the profit margin ratio of vaping products above 36 mg/ml nicotine is about 42.27% and that of vaping products at or below 36 mg/ml are higher at about 51.43%.<sup>13</sup> Accordingly, profit loss for small and non-small businesses that sell vape products will be mitigated by adult consumers transitioning to vaping products at 36 mg/ml nicotine or lower.

2. According to a study conducted by the Canadian government when adopting rules prohibiting the sale of vape products with nicotine levels higher than 2% nicotine by weight, the steepest cost retailers will face with such a change is having to discard products with higher levels of nicotine if not given time to sell those products before the restriction is imposed.<sup>14</sup>

Amendment 53559 provides a period just short of six weeks from implementation of the 5% restriction until it becomes effective during which retailers can sell their inventory of products containing 5% nicotine or higher, thus allow retailers to avoid the cost associated with disposing of products.

FICTION: The vape industry and retail merchants claim that once prohibited for sale in Utah, vapers will acquire prefilled electronic cigarettes or disposables with nicotine levels at or greater than 5% nicotine by weight or exceeding 59 mg/ml through cross border purchases in neighboring states, thus negating the desired effects of prohibiting such products.

## FACT: There is no conclusive, evidence-based, scientific data indicating that smuggling of vape products via cross-border purchases is a significant factor. To this point:

- 1. The vape industry and retail merchants cite a study by the Mackinac Center for Public Policy to substantiate their claims that smuggling of vape products with high nicotine levels will be substantial once Amendment 53559 is adopted. However, research of the Mackinac Center has been discredited as methodologically weak by a significant base of mainstream scientists. <sup>15</sup> Additionally, as reported by Common Cause, a watchdog group based in Washington, D.C., big tobacco and the vape industry are strong financial supporters of Mackinac which likely negates the objectivity of their research. <sup>16, 17</sup>
- Evidence-based research indicates that "The influence of cross-border shopping gradually diminishes as the distance to a neighboring city / state increases, and virtually disappears when a city is located 31 38 miles away from a neighboring city / state." 18

Considering this research result, the theory of significant cross-border shopping in Utah is negated given most of Utah's population lives far outside a 30-mile distance from the borders of neighboring states that sell vape products.

FICTION: Vapers claim that prohibiting the sale of prefilled electronic cigarettes or disposables with nicotine levels at or greater than 5% nicotine by weight or exceeding 59 mg/mL will "force adult consumers back to smoking tobacco."

FACT: Conclusive, evidenced-based, scientific study substantiates that the majority of those addicted to nicotine are unlikely to quit the use of products that provide them nicotine. To this point:

- 1. Nearly 45% of Utah adults who currently use e-cigarettes also smoke conventional cigarettes.<sup>19</sup>
- 2. Dual use of e-cigarettes and cigarettes is associated with higher levels of nicotine dependence and addiction.<sup>20</sup>
- 3. Evidence-based economic research indicates the more addicted a person is, the less likely they are to quit use of products they perceive as necessary to serve that addiction.<sup>21</sup>

## **END NOTES**

<sup>1</sup> 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/ 2019 (Feb. 2020).

<sup>2</sup> Utah State Office of Education. Data Reports – Enrollment and Demographics.

http://www.schools.utah.gov/data/Reports/Enrollment- Demographics.aspx (October 2017).

<sup>3</sup> Wang, TW, et al., "Characteristics of e-Cigarette Use Behaviors Among US Youth, 2020," JAMA Network Open, published online June 7, 2021.

<sup>4</sup> Jackler, RK, Ramamurthi, D, "Nicotine arms race: JUUL and the high-nicotine product market" Tobacco Control, published online February 6, 2019.

<sup>5</sup> Centers for Disease Control and Prevention (CDC), "Use of Electronic Cigarettes and Any Tobacco Product Among Middle and High School Students—United States, 2011-2018," Morbidity and Mortality Weekly Report (MMWR), 67(45):1276-1277,

https://www.cdc.gov/mmwr/volumes/67/wr/mm6745a5.htm?s\_cid=mm6745a5\_w. Current use defined as any use in the past month.

<sup>6</sup> National 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; Eaton DL, Kwan LY, Stratton K, editors. Public Health Consequences of E-Cigarettes.

Washington (DC): National Academies Press (US); 2018 Jan 23.

<sup>7</sup> 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/.

<sup>8</sup> Annual Healthcare Spending Attributable to Cigarette Smoking: An Update. American Journal of Preventive Medicine 2014;48(3):326–33. Web. 21 Oct 2016.

<sup>9</sup> Dai H, Catley D, Richter KP, Goggin K, Ellerbeck EF. Electronic Cigarettes and Future Marijuana Use: A Longitudinal Study. Pediatrics. 2018 May;141(5): e20173787. doi: 10.1542/peds.2017-3787. PMID: 29686146.

<sup>10</sup><u>https://utahafp.org/wp-content/uploads/2021/04/Utah\_AAFP\_Vaping\_Handout.pdf</u>.

<sup>11</sup>Alexa R. Romberg, Erin J. Miller Lo, Alison F. Cuccia, Jeffrey G. Willett, Haijun Xiao, Elizabeth C. Hair, Donna M. Vallone, Kristy Marynak, and Brian A. King. Patterns of nicotine concentrations in electronic cigarettes sold in the United States, 2013–2018.

<sup>12</sup> Ibid.

<sup>13</sup> Canada Gazette, Part 1, Volume 154, Number 51: Concentration of Nicotine in Vaping Products Regulations, 19 December 2020.

<sup>14</sup> Ibid.

<sup>15</sup> https://www.sourcewatch.org/index.php?title=Mackinac\_Center\_for\_Public\_Policy

<sup>16</sup> <u>https://en.wikipedia.org/wiki/Common\_Cause</u>, June 2021.

<sup>17</sup> Holding American Legislative Exchange Council Accountable; https://www.commoncause.org/our-work/moneyinfluence/alec/.

<sup>18</sup> Asplund, Marcus, Richard Friberg, and Fredrik Wilander. "Demand and Distance: Evidence on Cross–border Shopping." Journal of Public Economics 91 (2007): 141-157.

<sup>19</sup> Utah's Vaping Epidemic: By the Numbers Thomas Ylioja, PhD Clinical Director, Health Initiatives National Jewish Health; <a href="https://utahafp.org/wp-content/uploads/2021/04/Utah">https://utahafp.org/wp-content/uploads/2021/04/Utah</a> AAFP Vaping Handout.pdf.

<sup>20</sup> Choon-Young Kim, Yu-Jin Paek, Hong Gwan Seo, Yoo Seock Cheong, Cheol Min Lee, Sang Min Park, Da Won Park & Kiheon

Lee. Dual use of electronic and conventional cigarettes is associated with higher cardiovascular risk factors in Korean men; https://www.nature.com/articles/s41598-020-62545-3.

<sup>21</sup> Economic Concepts.com, Factors Determining Price Elasticity of Demand;

http://economicsconcepts.com/factors\_determining\_price\_elasticity\_of\_demand.htm (Feb. 2016).