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Testimony before the Missoula City Council
Regarding Banning the Sale of Flavored Vapor Products
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Tobacco Harm Reduction 101
Smoke-Free Alternatives Trade Association
November 18, 2020

Mayor Engen and members of the Council,

Tobacco Harm Reduction 101 (THR101) is a comprehensive website that seeks to provide policymakers with analysis and insight on tobacco and vapor products in all 50 states. The Smoke-Free Alternatives Trade Association (SFATA) is a nonprofit 501(c)6 organization that advocates for a reasonably regulated U.S. marketplace, to allow our member companies to provide smoke-free products to adult consumers, while promoting a positive public image for vapor products and educating businesses in our industry.

Although THR101 and SFATA applaud the City Council in addressing youth use of age-restricted products, we find that policymakers should refrain from policies that would restrict adult access to tobacco harm reduction products, as well as implementing policies that further subvert adult choices, such as is the case with the proposal to ban flavors in tobacco and vapor products.

Montana Youth Are Using Vapor Products Because of Friends, Family – Not Flavors

According to the 2019 Montana Youth Risk Behavior Survey, in 2019, 69.8 percent of Montana high school students reported ***not using an e-cigarette or vapor product on any day in the 30 days prior to the survey***.[1] Further, 12.2 percent reported using a vapor product between 1 to 9 days in the 30 days prior, 4.0 percent reported vaping on 20 or more days, and only 8.7 percent of Montana high school students reported daily e-cigarette use.

Interestingly, many Montana youth are not using vapor products because of availability of “flavors such as mint, candy, fruit, or chocolate.” Of the 54.8 percent of respondents that indicated a reasoning for e-cigarette use, only 7 percent reported flavors. Interestingly, 13.5 percent of respondents cited “friend or family member used them” and 25.9 percent cited “other reason.” This is similar to other recent youth surveys on tobacco use and reasons for use.

For example, only 23.9 percent of Connecticut high school students reported “flavors” as a reason for using e-cigarettes in 2017, compared to 41.6 percent who reported they used a vapor product because a friend and/or family member had used them.[2] Similarly, only 26.4 percent of Hawaii high school students cited flavors as a reason to use e-cigarettes in 2017.[3] In 2019, only 4.5 percent of Rhode Island high school students claimed to have used e-cigarettes because they were available in flavors,

while 12.5 cited the influence of a friend and/or family member who used them.[4] Only 17 percent of Vermont high school students reported flavors as a reason to use e-cigarettes in 2017, and 33 percent cited friends and family members.[5] In 2019, only 10 percent of Vermont youth that used e-cigarettes cited flavors as a primary reason for using e-cigarettes, while 17 percent of Vermont high school students reported using e-cigarettes because their family and/or friends used them.[6] Lastly, only 6.2 percent of Virginia high school students reported using e-cigarettes because of flavors, while 11.3 percent used them because a friend and/or family member used them.[7]

Tobacco Compliance Checks

The U.S. Food and Drug Administration (FDA) routinely conducts inspections on tobacco and vapor product retailers, in which the agency uses a minor in an attempt to purchase tobacco and/or vapor products. Usually, within two months from the inspection date, the agency will issue decision letters to the inspected retailers.

Between February 22, 2013 and February 14, 2020, the FDA issued 555 tobacco compliance decision letters to tobacco and vapor product retailers in Missoula, MT.[8] Of those, only 9 retailers were issued warning letters, meaning 1.6 percent of inspections resulted in violations. Of those violations, only four involved the sales of electronic cigarettes and vapor products – all of which were closed, pod systems. Missoula City Council should note that **flavored prefilled pods were banned nationally by executive order in January, 2020**.[9]

Effects of Flavor Bans

Flavor bans have had little effect on reducing youth e-cigarette use and may lead to increased combustible cigarette rates, as evidenced in San Francisco, California.[10]

In April 2018, the ban on flavored e-cigarettes and vapor products went into effect in San Francisco and in January, 2020, the city had implemented a full ban on any electronic vapor product. Unfortunately, these endeavors have failed to lower youth tobacco and vapor product use.

Data from a snapshot of the 2019 Youth Risk Behavior Survey show that 16 percent of San Francisco high school students had used a vapor product on at least one occasion in 2019, an increase from 7.1 percent that had used an e-cigarette in 2017.[11] Current daily use more than doubled from 0.7 percent of high school students in 2017 to 1.9 percent of San Francisco high school students reporting using an e-cigarette every day in 2019.

Worse, despite nearly a decade of significant declines, youth use of combustible cigarettes seems to be on the rise in Frisco. In 2009, 35.6 percent of San Francisco high school students reported ever trying combustible cigarettes. This figure continued to decline to 16.7 percent in 2017. In 2019, the declining trend reversed, and 18.6 percent of high school students reported ever trying a combustible cigarette. Similarly, current cigarette use increased from 4.7 percent of San Francisco high school students in 2017 to 6.5 percent in 2019.

An April 2020 study in *Addictive Behavior Reports* examined the impact of San Francisco's flavor ban on young adults by surveying a sample of San Francisco residents aged 18 to 34 years.[12] Although the ban did have an effect in decreasing vaping rates, the authors noted "a significant increase in cigarette smoking" among participants aged 18 to 24 years old.

Other municipal flavor bans have also had no effect on youth e-cigarette use.[13] For example, Santa Clara County, California, banned flavored tobacco products to age-restricted stores in 2014. Despite this, youth e-cigarette use *increased*. In the 2015-16 California Youth Tobacco Survey (CYTS), 7.5 percent of Santa Clara high school students reported current use of e-cigarettes. In the 2017-18 CYTS, this *increased* to 10.7 percent.

Tobacco Economics 101: Montana

In 2019, 16.6 percent of adults in Montana smoked tobacco cigarettes, amounting to 139,450 smokers in 2019.[14] When figuring a pack-per-day, over 1 billion cigarettes were smoked in 2019 by Montanans, or about 2.8 million per day.[15]

[16]

In 2019, Montana imposed an $1.70 excise tax on a pack of cigarettes. In 2019, Montana collected over $86.5 million in cigarette excise taxes, when figuring for a pack-a-day habit. This amounts to $602.50 per smoker per year.

In 2019, Montana spent $5 million on tobacco control programs, or $35.85 per smoker per year. This is 5 percent of what the state received in excise taxes in 2019, based off a pack-a-day habit. When figuring the amount spent on youth in the state, Montana spent $ 21.86 per year on each resident under 18 years of age.

Vapor Economics 101: Montana

Electronic cigarettes and vapor products are not only a harm reduction tool for hundreds of thousands of Montana smokers, they're also an economic boon. According to the Vapor Technology Association, in 2018, the industry created 313 direct vaping-related jobs, including manufacturing, retail, and wholesale jobs in Montana, which generated $11 million in wages alone.[17] Moreover, the industry has created hundreds of secondary jobs in Big Sky Country, bringing the total economic impact in 2018 to $67,507,100. In the same year, Montana received more than $2 million in state taxes attributable to the vaping industry. The substitution of e-cigarettes for combustible cigarettes could also save the state in health care costs.

It is well known that Medicaid recipients smoke at rates of twice the average of privately insured persons, according to the Centers for Disease Control and Prevention (CDC). In 2013, "smoking-related diseases cost Medicaid programs an average of $833 million per state."[18]

A 2015 policy analysis by State Budget Solutions examined electronic cigarettes' effect on Medicaid spending. The author estimated Medicaid savings could have amounted to $48 billion in 2012 if e-cigarettes had been adopted in place of combustible tobacco cigarettes by all Medicaid recipients who currently consume these products.[19]

A 2017 study by R Street Institute examined the financial impact to Medicaid costs that would occur should a large number of current Medicaid recipients switch from combustible cigarettes to e-cigarettes or vaping devices. The author used a sample size of "1% of smokers [within] demographic groups permanently" switching. In this analysis, the author estimates Medicaid savings "will be approximately $2.8 billion per 1 percent of enrollees," over the next 25 years.[20]

E-Cigarettes and Tobacco Harm Reduction

The evidence of harm associated with combustible cigarettes has been understood since the 1964 U.S. Surgeon General's Report that smoking causes cancer. Research overwhelmingly shows the smoke created by the burning of tobacco, rather than the nicotine, produces the harmful chemicals found in combustible cigarettes.[21] There are an estimated 600 ingredients in each tobacco cigarette, and "when burned, [they] create more than 7,000 chemicals."[22] As a result of these chemicals, cigarette smoking is directly linked to cardiovascular and respiratory diseases, numerous types of cancer, and increases in other health risks among the smoking population.[23]

For decades, policymakers and public health officials looking to reduce smoking rates have relied on strategies such as emphasizing the possibility of death related to tobacco use and implementing tobacco-related restrictions and taxes to motivate smokers to quit using cigarettes. However, there are much more effective ways to reduce tobacco use than relying on government mandates and "quit or die" appeals.

During the past 30 years, the tobacco harm reduction (THR) approach has successfully helped millions of smokers transition to less-harmful alternatives. THRs include effective nicotine delivery systems, such as smokeless tobacco, snus, electronic cigarettes (e-cigarettes), and vaping. E-cigarettes and vaping devices have emerged as especially powerful THR tools, helping nearly three million U.S. adults quit smoking from 2007 to 2015.

Indeed, an estimated 10.8 million American adults were using electronic cigarettes and vapor products in 2016.[24] Of the 10.8 million, only 15 percent, or 1.6 million adults, were never-smokers, indicating that e-cigarettes are overwhelmingly used by current and/or former smokers.

E-cigarettes were first introduced in the United States in 2007 by Ruyan, a Chinese manufacturer.[25] Soon after their introduction, Ruyan and other brands began to offer the first generation of e-cigarettes,

called “cigalikes.” These devices provide users with an experience that simulates smoking traditional tobacco cigarettes. Cig-alikes are typically composed of three parts: a cartridge that contains an e-liquid, with or without nicotine; an atomizer to heat the e-liquid to vapor; and a battery.

In later years, manufacturers added second-generation tank systems to e-cigarette products, followed by larger third-generation personal vaporizers, which vape users commonly call “mods.”[26] These devices can either be closed or open systems.

Closed systems, often referred to as “pod systems,” contain a disposable cartridge that is discarded after consumption. Open systems contain a tank that users can refill with e-liquid. Both closed and open systems utilize the same three primary parts included in cigalikes—a liquid, an atomizer with a heating element, and a battery— as well as other electronic parts. Unlike cig-alikes, “mods” allow users to manage flavorings and the amount of vapor produced by controlling the temperature that heats the e-liquid.

Mods also permit consumers to control nicotine levels. Current nicotine levels in e-liquids range from zero to greater than 50 milligrams per milliliter (mL).[27] Many users have reported reducing their nicotine concentration levels after using vaping devices for a prolonged period, indicating nicotine is not the only reason people choose to vape.

Health Effects of Electronic Cigarettes and Vapor Products

Despite recent media reports, e-cigarettes are significantly less harmful than combustible cigarettes. Public health statements on the harms of e-cigarettes include:

Public Health England: In 2015, Public Health England, a leading health agency in the United Kingdom and similar to the FDA, found “that using [e-cigarettes are] around 95% safer than smoking,” and that their use “could help reduce smoking related disease, death and health inequalities.”[28] In 2018, the agency reiterated their findings, and stated vaping to be “at least 95% less harmful than smoking.”[29]

The Royal College of Physicians: In 2016, the Royal College of Physicians found the use of e-cigarettes and vaping devices “unlikely to exceed 5% of the risk of harm from smoking tobacco.”[30] The Royal College of Physicians (RCP) is another United Kingdom-based public health organization, and the same public group the United States relied on for its 1964 Surgeon General’s report on smoking and health.

The National Academies of Sciences, Engineering, and Medicine: In January 2018, the academy noted “using current generation e-cigarettes is less harmful than smoking.”[31]

The American Cancer Society: Most recently, the American Cancer Society noted that “e-cigarette use is likely to be significantly less harmful for adults than smoking regular cigarettes.”[32] This is attributed to the fact that “e-cigarettes do not contain or burn tobacco.”

A 2017 study in *BMJ*’s peer-reviewed journal *Tobacco Control* examined health outcomes using “a strategy of switching cigarette smokers to e-cigarette use … in the USA to accelerate tobacco control progress.”[33] The authors concluded that replacing e-cigarettes “for tobacco cigarettes would result in an estimated 6.6 million fewer deaths and more than 86 million fewer life-years lost.”

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Many Montana youth are *not using* electronic cigarettes and vapor products, as evidenced in the 2019 Montana Youth Risk Behavior Survey, and those who are using e-cigarettes are not using them due to flavors. It is disingenuous that lawmakers would seek to prohibit adult access to tobacco harm reduction tools, especially as Montana invests very little of existing tobacco monies on programs that help adults quit smoking combustible cigarettes.

The ban on flavored tobacco and vapor products is unlikely to reduce youth e-cigarette use and will lead to black markets. Further, it will eliminate jobs and revenue, at a time when Montana needs as much revenue as possible.

Electronic cigarettes and vapor products have helped millions of American adults quit smoking, and their use should be promoted. Loveland lawmakers ought to work with retailers and public health groups on programs and policies that would limit youth purchases.

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"People smoke for nicotine but they die from the tar." -Michael Russell
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