



Date: November 5, 2019

To: Thomas B. Modica, Acting City Manager *T. Modica*

From: Kelly Colopy, Director of Health and Human Services *KC*

For: Mayor and Members of the City Council

Subject: Information on Flavored Vaping Products

At its meeting on October 1, 2019, the City Council approved a recommendation to direct the City Attorney to draft an Ordinance temporarily banning the sale of flavored vapor products and flavored tobacco products in Long Beach, including menthol tobacco products, until further action by the City Council. The City Council also requested that, prior to adoption of an Ordinance, the Health and Human Services Department (Health Department) provide data and information regarding flavored vaping products.

Impacts of Vaping

E-cigarettes, hookah pens, e-pipes, and other “vape” products are battery-operated devices that allow users to inhale aerosol liquid (e-juice or e-liquid), often referred to as vapor or “vape.” E-liquids not only contain nicotine, but other chemicals that are not proven safe to breathe.

E-cigarettes and other vape devices provide nicotine levels ranging from 0 milligrams to more than 50 milligrams in one cartridge or pod. According to the Centers for Disease Control (CDC), e-cigarettes are considered highly efficient delivery systems for both nicotine and cannabis, and pods utilized by vape companies, such as Juul, utilize nicotine salts that allow for higher levels of nicotine to be consumed. This degree of nicotine use is leading to increased levels of dependency, more frequent use, and addiction among youth and young adults (ages 18-24).¹ Moreover, these high levels of nicotine have damaging effects on the developing brain because brain development continues until about the age of 25 or older. Nicotine changes adolescents’ brain cell activity in the parts of the brain responsible for attention, learning, and memory and can interfere with emotion and impulse control.² The younger a person is when they start using nicotine, the more likely they are to become addicted and the more difficult it is for them to quit.³

Flavorings in e-cigarettes can pose their own health risks. According to the Surgeon General, some of the flavorings found in e-cigarettes have been shown to cause serious lung disease when inhaled.⁴ There are concerns that the chemical flavorings found in some e-cigarettes and e-liquids could cause respiratory damage when the e-cigarette aerosol is heated and inhaled deeply into the lungs.⁵ E-cigarette use exposes the lungs to a variety of chemicals, including those added to e-liquids, and other chemicals produced during the heating process. At least 10 chemicals identified in e-cigarette aerosol are on California’s Proposition 65 list of carcinogens and reproductive toxins.⁶ Moreover, e-cigarette aerosol is made up of a particle

concentration higher than that of conventional cigarette smoke, which may exacerbate respiratory ailments like asthma, and constrict arteries, which could trigger a heart attack.^{7 8}

While much is still unknown about the long-term health effects of e-cigarette aerosol on both the user and those who are exposed to the secondhand aerosol, studies show that short-term use of e-cigarettes is known to increase respiratory resistance and impair lung function, and daily users have double the risk of heart attack.^{9 10}

Vaping Associated Pulmonary Injury

Since June 2019, cases of Vaping Associated Pulmonary Injury (VAPI) have been identified throughout the country, State of California, and in Long Beach where there have been three cases reported. Currently, the CDC and the U.S. Food and Drug Administration (FDA) are investigating the outbreak to determine the exact source. As of October 22, 2019, there have been 1,604 cases of VAPI nationwide, including 136 cases in California. The injury has shown to be deadly, as 34 deaths have been confirmed, three of which occurred in California. VAPI is occurring primarily in young people, with nearly 80 percent of cases involving victims under 35 years old, and the median age of 24 years old. Symptoms are often occurring suddenly in previously healthy people, and include shortness of breath, coughing, chest pain, vomiting, diarrhea, and weight loss. Many have required hospitalization, and 30 percent of cases in California have required treatment with a mechanical ventilator, or “life support”. Vaping cannabis also carries the same risks. Despite the common assumption that vaporizing cannabis is an alternative, it is also suspected to be linked to VAPI.

While the CDC and FDA have not yet identified the exact cause of the lung injuries, their investigations have shown that products containing Tetrahydrocannabinol (THC) were reported in most cases. The CDC, FDA, State and local health jurisdictions continue to investigate the outbreak to determine the source. In the meantime, the Health Department is supporting the CDC and FDA warnings that people should not use e-cigarette or vaping products that contain THC or nicotine, nor should they buy any type of vaping product, specifically those containing THC, from illicit sources.

The Health Department is coordinating a response to the VAPI advisories. A webpage dedicated to answering community questions and a hotline that community members can call if they have questions about VAPI is being developed. Additionally, the Health Department sent out a press release outlining the advisory and conducted two community presentations to alert community and providers in September 2019. Staff are available to conduct additional presentations upon request.

Lack of Regulation and Inadequate Labeling

E-cigarettes are not regulated by the FDA and are not yet subject to manufacturing standards leading to a wide variability in the type of vape products available on the market. The quality and content of ingredients varies among brands, as does the level and concentration of nicotine in e-liquid. In fact, labeling is not a reliable indicator of nicotine content as studies

have found that incorrect labeling poses a significant risk to consumers. In 2018, studies found that 91 percent of the e-liquids marketed as “nicotine-free” contained various levels of nicotine.¹¹ Overall, nicotine levels in e-cigarettes are highly variable, with some reaching or exceeding levels of combustible cigarettes.¹³

Despite increased oversight and testing following legalization of cannabis, the safety of cannabis e-liquid is still highly questionable. A plethora of research suggests that high frequency and high-potency THC use, results in negative long-term effects including memory loss, addiction, and other cognitive defects, particularly for users under age 25.²¹ While recent testing requirements have addressed pesticide and microorganism contamination of legal cannabis products, the approved ingredients in artificially flavored cannabis concentrates are sourced from e-cigarette companies and often contain chemicals that are harmful when inhaled.

No e-cigarette product has been FDA approved for smoking cessation. The long-term health impacts are not yet known, and users may continue to be exposed to some of the same toxic chemicals found in combustible cigarette smoke. While many believe that e-cigarette products help people stop smoking, preliminary results indicate that they do not reduce nicotine consumption. In fact, for those who stop smoking utilizing e-cigarette devices as the cessation technique, 80 percent continued utilizing the e-cigarettes for continued nicotine addiction.²⁴ The FDA has approved a variety of products as cessation aids to help reduce nicotine dependence. Products include nicotine gum, skin patches, lozenges, oral inhalers, and nasal spray, as well as medications called varenicline and bupropion.

Utilization of Flavored Vape Products

Nationwide, youth e-cigarette usage significantly increased nearly 20-fold in less than 10 years (from 1.5 percent in 2011 to 20.8 percent in 2018). Preliminary 2019 data show that number has increased to 29 percent of youth utilizing e-cigarettes²⁵. In fact, the CDC found that the overall increase in tobacco product use among high-schoolers in 2018 was attributed to e-cigarettes, an increase of 1.5 million more youth users.²⁶ Long Beach-specific data on youth tobacco usage are unavailable. Both the FDA and U.S. Surgeon General have declared that youth use of e-cigarettes is an epidemic.

Flavors play a major role in youth initiation and their continued use of e-cigarettes, with over 70 percent of vapers using flavored e-cigarettes. Flavors mask the taste of tobacco and make it easier for new users to initiate tobacco use. Flavors can also create the false impression that a tobacco product is less harmful than it really is and lead to increased nicotine intake. Of youth who have ever used a tobacco product, 81 percent initiated tobacco consumption with a flavored product, including cigarillos, hookah, and menthol products. Where adult users are far more likely to report using tobacco flavor alone, adolescents and young adults are more likely to use flavors such as fruit and candy. In recent years, there has been an explosion of sweet-flavored tobacco products.

As of 2017, there were more than 15,500 unique e-cigarette flavors available online.²⁷ E-cigarette liquids and pods are being sold in youth-friendly flavors such as cotton candy, gummy bear, and juice box - flavors that federal law prohibits in conventional cigarettes.²⁸ The 2016 Surgeon General's report on e-cigarettes concluded that flavors are among the most commonly cited reasons for using e-cigarettes among youth and young adults.²⁹ Among high school students in Los Angeles County, 82 percent of e-cigarette users preferred fruit or sweet flavors over others.³⁰ Furthermore, 30 percent of youth utilizing e-cigarettes are using them for THC.³¹

A 2019 Cannabis Perceptions and Usage Survey, conducted by the Health Department found a significant relationship between age and vaping utilization, with individuals age 24 and younger more likely to consume cannabis via vape than older cannabis users. More than half (57.7 percent) of those who reported vaping with cannabis in Long Beach were under 25 years old. More than one in ten of those who reported vaping with cannabis were under 18 years old and are not legally permitted to consume cannabis.

Availability of Vaping Products in Long Beach

In 2016, Health Department staff participated in the Healthy Stores for a Healthy Community campaign, a statewide collaboration between tobacco use prevention, nutrition and alcohol prevention partners to survey 133 stores in Long Beach. In 2016, 82 percent of stores sold flavored tobacco products; 77 percent were near schools. The data also showed that 41 percent of stores sold e-cigarettes. The 2019 Healthy Stores for a Healthy Community campaign surveyed 270 stores in Long Beach. While the report will not be available until the Spring of 2020, preliminary data suggests that vaping products are even more available now than in 2016.

Results of the Statewide 2017-18 California Student Tobacco Survey found that 61 percent of youth e-cigarette users in Los Angeles County reported not paying for their own e-cigarettes, indicating it is unlikely they purchased through legal retailers. The same survey found that 61 percent of high school students in Los Angeles County who report buying e-cigarettes purchased them in vape shops.³²

Efforts in Other Jurisdictions to Regulate Flavored Tobacco

As of October 2019, 42 jurisdictions in California currently regulate the sale of flavored tobacco products and many more are currently working on ordinances that would ban the sale of flavored tobacco or all tobacco products, including the Cities of Manhattan Beach, Redondo Beach, Culver City, Burbank, and Gardena. An ordinance banning flavored tobacco products, including menthol, took effect in Los Angeles County on October 31, 2019. These bans are consistent with the recommendations from the CDC and the Surgeon General.

In Long Beach, there are 13 licensed vape-only shops, as well as more than 490 outlets licensed to sell tobacco and other nicotine products. The Health Department's Bureau of Environmental Health effectively administers the Tobacco Retail Enforcement Program

(TREP), licensing all tobacco retail shops, and the Cannabis Inspection Program for all licensed cannabis facilities in Long Beach. Environmental Health educates businesses on both tobacco- and cannabis-related laws.

Health Department Educational Efforts

Earlier this year, the Health Department's Tobacco Education Program (TEP) launched a communitywide vaping awareness campaign to alert the community of the risks of vaping. The TEP, in partnership with the Long Beach Unified School District, is providing information to school principals, school nurses, and presentations to parent and student groups. As part of the educational campaign, the TEP also provides presentations to community groups and disseminates educational information at community events.

In addition, the TEP facilitates a seven-week long summer leadership program for local youth who are interested in making Long Beach healthier by promoting a tobacco and vape-free lifestyle. This year, 23 youth graduated from the Healthy Long Beach Youth Leadership Program. During the program, they developed youth-led messaging and created four public service announcements on the risks of vaping and smoking. The youth will continue to work with the Health Department throughout the year to develop a youth-led vaping prevention campaign. The youth identified three messages that would resonate with Long Beach youth including: (1) History is repeating itself, and vaping is causing another generation of kids to become addicted to nicotine; (2) Smoking/Vaping sets a bad example for younger siblings and can affect your whole family; and, (3) Vaping affects concentration and mood, which has negative consequences for school and life.

The TEP also provides technical assistance to providers and community members who are looking for local resources to quit smoking. Participants receive a free quit-smoking toolkit and resources to assist with identifying the appropriate quit-smoking resources on an individual basis.

Additionally, the Health Department's cannabis education program GreenlightLB was awarded a grant from the California Office of Traffic Safety (OTS) for the continuation of activities designed to reduce risky cannabis use behaviors including drug-impaired driving. Activities include ongoing awareness, promotion, education, and intervention around bars, clubs, and dispensaries. GreenlightLB also works with schools to educate high-school-age students on the consequences of cannabis use, including driving while impaired, and involves promoting substance-impaired driving information and awareness campaign through print and digital media, and coordination of a Long Beach Safe Driver Awareness Week. In the past year, GreenlightLB distributed cannabis health education materials to 38 agencies, including 18 newly licensed cannabis retailers, to share with their patrons, and participated in 23 outreach events. GreenlightLB also hosted four "driveGrounded" outreach events in partnership with Long Beach Police Department to educate bar and restaurant patrons on the impact of alcohol, cannabis, and other drugs on their ability to drive safely and legally.

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Endnotes:

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