

Addressing the rising prevalence of electronic cigarette use in Los Angeles County

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Executive Summary

Electronic cigarettes, or e-cigarettes, are battery-operated products designed to convert liquid nicotine, flavors, and other chemicals into a vapor inhaled by the user.¹ In 2010, the U.S. Court of Appeals allowed the United States Food and Drug Administration (FDA) to regulate e-cigarettes as a tobacco product under the Family Smoking Prevention and Tobacco Control Act.² To date, however, the FDA has yet to issue these regulations regarding the manufacture, sale, or usage of e-cigarettes.

The popularity of e-cigarettes has increased since they were first introduced in the U.S. in 2007. While their effects remain largely unknown, early studies indicate that e-cigarettes pose potential dangers for users, as well as for non-users who passively inhale these chemical vapors. Given the unknown public health impacts and the current lack of regulation, the Los Angeles County Department of Public Health recommends a precautionary approach in regulating the sale and use of e-cigarettes, until their safety is conclusively established.

The Los Angeles County Public Health Department supports three policy recommendations to address the proliferation of electronic cigarettes:

- Amend local smoke-free policies by including “e-cigarette use” in the definition of “smoking”. This will prohibit e-cigarette use in existing smoke-free areas, thereby preventing inhalation of secondhand e-cigarette vapors or “passive vaping”.
- Amend existing tobacco retailer license (TRL) ordinances by including e-cigarettes in the definition of “tobacco product”. This will require e-cigarette retailers to obtain a TRL and become subject to enforcement measures that discourage sales to minors.
- Impose taxes on e-cigarettes to make retail prices more comparable to those of cigarettes. Higher prices will discourage e-cigarette purchases among price-sensitive minors.

Electronic nicotine delivery devices such as e-cigarettes are often promoted and used as a means to support smoking cessation. However, this use is not FDA approved and, therefore, e-cigarettes should not at this time be promoted as a tobacco cessation aid.

Background



Electronic nicotine delivery devices, most commonly produced as e-cigarettes, cigars, hookah and pipes, are battery-operated products designed to convert nicotine, flavor and other chemicals into vapor. While the e-cigarette market makes up just 1% of the U.S. cigarette industry, it has experienced a

surge in popularity since its introduction in 2007. Retail sales this year are expected to reach \$1.7 billion, or more than double the sales in 2012.³ In addition, many more Americans are reporting awareness and use of e-cigarettes. For example, 21 percent of U.S. adult smokers had used e-cigarettes in 2011, up from 10 percent in the previous year.⁴

E-cigarette use is growing among diverse groups. A 2011 U.S. survey reveals that the most likely users of e-cigarettes are smokers intending to quit cigarette use.⁵ The same survey also found that slightly more women than men tried e-cigarettes. Furthermore, a 2013 Florida Youth Tobacco Survey indicates that e-cigarette use among youth may be on the rise: since 2011, the rate of high school and middle school students who have tried an e-cigarette at least once increased by 102 percent and 43 percent, respectively.⁶

The popularity of e-cigarettes may stem from manufacturers' claims that they are a healthier alternative to cigarettes. Although that claim has yet to be substantiated, the e-cigarette differs from traditional cigarettes by utilizing water vapor, not tobacco smoke, to deliver nicotine. The user generates water vapor by inhaling through the mouthpiece and powering a battery-charged atomizer, which vaporizes a cartridge containing nicotine, flavors, and humectants. The user then inhales that vapor mixture, later exhaling it into the environment.

Electronic cigarettes can vary widely to fit a user's preferences or needs. The cartridges are replaceable and come in a variety of nicotine levels and flavors, such as cherry, tobacco, and coffee. In addition, e-cigarettes can be manufactured in disposable or reusable forms that mimic a cigarette, pipe, or more discreet items such as pens.

Issue Statement

Absence of Regulations and Growing E-cigarette Use

The U.S. Food and Drug Administration continues to warn the public about the potential harms of e-cigarettes. Studies led by the FDA and the German Cancer Research Center have detected the presence of carcinogens and toxins in e-cigarette cartridges and attributed them to quality control processes that are substandard or non-existent.^{7,8} In one study, for example, three separate but identical cartridges contained varying levels of nicotine; another cartridge delivered twice the level of nicotine as advertised; and several cartridges that were marketed as nicotine-free actually contained low-levels of nicotine. Further studies are required to fully understand the health and safety effects of these products.

In 2010, the U.S. Court of Appeals allowed the FDA to regulate e-cigarettes as a tobacco product under the Family Smoking Prevention and Tobacco Control Act. Doing so could require the e-cigarette industry to follow the same regulations that guide the tobacco manufacturing process, including: ingredient listing, good manufacturing practices, and advertising restrictions.⁹ The FDA has yet to issue these regulations. In the, the absence of government oversight, manufacturers and retailers have been able to advertise their products as a healthy, safe alternative to cigarettes. Furthermore, the e-cigarette industry advertises through multiple media platforms such as television, magazines, and social media sites – practices that the tobacco industry has not been allowed to engage in for many years. These marketing tactics have fueled the e-cigarette's popularity and also increased public misperceptions that e-cigarettes can be utilized as a smoking cessation device, though the government has not approved them for that use.

E-cigarettes are also not subject to tobacco taxes, which helps sustain their low prices. As a result, e-cigarette use has become more affordable and widespread among smokers and former smokers, and price-sensitive youth.

Passive Vaping

Due to carcinogens and toxins found in e-cigarette vapors, passive vaping among non-users poses a potential health concern. One study concluded that e-cigarettes are a new source of volatile organic compounds (VOC) in the indoor environment, and their effects should be examined.¹⁰ Long term exposure to these chemicals and toxins, for the user and passive user, has not been thoroughly explored; however, preliminary evidence suggests that vapors may pose some risk. As a result, manufacturers' claims that e-cigarettes can be used safely virtually anywhere are premature, considering that the health impact of passive vaping is not yet fully understood.

Again, the lack of conclusive evidence has given manufacturers the opportunity to market e-cigarette emissions as water vapors that are harmless or safer than secondhand smoke. As most smoke-free ordinances do not specifically define e-cigarettes as a tobacco product, many retailers encourage e-cigarette use in traditionally smoke-free areas such as indoor workplaces. This not only creates confusion about the permissibility of e-cigarette use in these spaces, but also the challenge of enforcing existing smoke-free laws, particularly because e-cigarettes are similar to regular cigarettes in their appearance and how they are used. The increasing prevalence of e-cigarette and allowing their use in places where smoking is prohibited threatens decades of public health efforts to denormalize smoking.

Despite the lack of health information on passive vaping, there is public support for regulations. According to a 2010 study by the University of Michigan, 69 percent of respondents supported a ban on e-cigarettes in the workplace.

Youth Appeal and Access

The Centers for Disease Control and Prevention (CDC) has reported that the percentage of high school students who have ever used e-cigarettes more than doubled, from 4.7% to 10.0%, between 2011 and 2012.¹¹ Current e-cigarette use in this group also increased from 1.5% to 2.8%, and the large majority (80.5%) of these users also smoked cigarettes.¹² The accessibility and design of e-cigarettes have likely contributed to this boom in popularity. Currently, most states do not prohibit the sale of e-cigarettes to minors, and e-cigarettes are liberally advertised on various social media platforms, websites, and TV commercials. Presented in enticing fruit and candy flavors, e-cigarettes successfully deliver the nicotine kick that cigarettes offer, without the harsh taste or secondhand smoke. E-cigarettes can also mimic commonplace items, such as pens, which are easier to conceal and use in smoke-free indoor and outdoor spaces. Manufacturers' advertising that their products can be used anywhere and without the strong odors or harshness of tobacco likely further fuels the appeal of e-cigarettes, while the lack of retail regulations and use bans have helped increase their visibility and accessibility among youth.

E-Cigarette Policies in Other Jurisdictions

The electronic cigarette's similarities to traditional cigarettes – in appearance and intent – combined with their potential to cause health harms have prompted various governments to adopt precautionary measures that regulate their sale and use. California and just 10 other states, for example, have passed laws prohibiting the sale of e-cigarettes to minors. Until the FDA determines how it will exert its authority over e-cigarettes, the regulation of these products will continue to fall mainly in the hands of state and local governments.

Vaping Restrictions

California does not have a state law that prohibits vaping in areas where smoking is not allowed. These areas include, but are not limited to, indoor workplaces, government buildings, and

playgrounds. The state legislature is considering a bill (SB 648, Corbett) that prohibits vaping where smoking is prohibited. However, it will not cover all areas that local laws currently protect. As a result, local policies must be modified separately to prohibit vaping in places where smoking is prohibited. In 2010, New Jersey became the first state to ban the use of e-cigarettes in public places and workplaces; Utah followed by banning vaping in indoor public places. In addition, several counties, including Contra Costa (CA), Seattle-King County (WA), Tacoma-Pierce County (WA), Suffolk County (NY), and Madison County (KY), prohibit vaping in workplaces. Individual organizations and agencies, such as Amtrak and the U.S. Department of Transportation, have taken precautionary stances by prohibiting vaping on their transportation vehicles.^{13,14}

Locally, some cities in Los Angeles County have revisited their smoke-free policies to address e-cigarette use in their communities. For example, both Huntington Park and Compton have included e-cigarette use in their definition of “smoking,” prohibiting vaping in smoke-free areas such as public spaces, workplaces, and multi-unit housing complexes.

Licensing E-Cigarette Retailers

Unlike tobacco products, there is minimal or no regulation of the sale of e-cigarettes in most states, including California. However, 48 cities and counties in the state have independently passed or modified existing ordinances to require a license to sell e-cigarettes. In Los Angeles County alone, at least 18 cities, including Glendale, Burbank and Compton, require such a license.¹⁵

Recommended Local Policy Actions

- Amend local smoke-free policies by including “e-cigarette use” in the definition of “smoking”. This will prohibit e-cigarette use in existing smoke-free areas, thereby preventing inhalation of secondhand e-cigarette vapors or “passive vaping”.
- Amend existing tobacco retailer license (TRL) ordinances by including e-cigarettes in the definition of “tobacco product”. This will require e-cigarette retailers to obtain a TRL and become subject to enforcement measures that discourage sales to minors.
- Impose taxes on e-cigarettes to make retail prices more comparable to those of cigarettes. Higher prices will discourage e-cigarette purchases among price-sensitive minors.

Tobacco Cessation

Electronic nicotine delivery devices such as e-cigarettes are often promoted and used as a means to support smoking cessation. However, this use is not FDA approved and, therefore, e-cigarettes should not at this time be promoted as a tobacco cessation aid.

¹ U.S. Food and Drug Administration. “Electronic Cigarettes (e-Cigarettes).” *FDA*. 25 April 2013. Available at: <http://www.fda.gov/NewsEvents/PublicHealthFocus/ucm172906.htm>

² U.S. Food and Drug Administration. “Regulation of E-Cigarettes and Other Tobacco Products.” *FDA*. 25 April 2011. Available at: <http://www.fda.gov/NewsEvents/PublicHealthFocus/ucm252360.htm>

³ Mangan D. “E-cigarette sales are smoking hot, set to hit \$1.7 billion.” *CNBC*. 28 August 2013. Available at: <http://www.cnbc.com/id/100991511>

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- ⁴ Centers for Disease Control and Prevention. "Press Release: About one in five U.S. adult cigarette smokers have tried an electronic cigarette." *CDC*. 28 February 2013. Available at: http://www.cdc.gov/media/releases/2013/p0228_electronic_cigarettes.html
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- ⁶ Florida Department of Health . "2013 Florida Youth Tobacco Survey: Fact Sheet 12 – Youth Electronic Cigarette Use." Available at: http://www.doh.state.fl.us/disease_ctrl/epi/Chronic_Disease/FYTS/2013_FYTS_12_Ecigarette.pdf
- ⁷ U.S. Food and Drug Administration. "FDA and Public Health Experts Warn About Electronic Cigarettes." *FDA*. 22 July 2009. Available at: <http://www.fda.gov/newsevents/newsroom/pressannouncements/ucm173222.htm>
- ⁸ German Cancer Research Center (Ed.) "Electronic Cigarettes – An Overview." *Red Series Tobacco Prevention and Tobacco Control*. (2013).
- ⁹ U.S. Food and Drug Administration. "Regulation of E-Cigarettes and Other Tobacco Products." *FDA*. 25 April 2011. Available at: <http://www.fda.gov/NewsEvents/PublicHealthFocus/ucm252360.htm>
- ¹⁰ Schripp T., Markewitz D., Uhde E., & Salthammer T. "Does e-cigarette consumption cause passive vaping?" *Indoor Air*. (2013). Vol. 23: 25-31.
- ¹¹ Centers for Disease Control and Prevention. "Morbidity and Mortality Weekly Report: Notes from the Field: Electronic Cigarette Use Among Middle and High School Students – United States, 2011-2012. *MMWR* 2013;62:p729.
- ¹² Centers for Disease Control and Prevention. "Morbidity and Mortality Weekly Report: Notes from the Field: Electronic Cigarette Use Among Middle and High School Students – United States, 2011-2012. *MMWR* 2013;62:p729.
- ¹³ U.S. Department of Transportation. "DOT Policy on E Cigarettes." *DOT*. 3 January 2013. Available at: <http://www.dot.gov/airconsumer/air-consumer/dot-policy-e-cigarettes>
- ¹⁴ AMTRAK. "Smoking Policy". *AMTRAK*. Available at: <http://www.amtrak.com/smoking-policy>
- ¹⁵ American Lung Association. "Tobacco Retailer Licensing and Electronic Cigarettes." *The Center for Tobacco Policy and Organizing*. June 2013. Available at: http://www.center4tobaccopolicy.org/CTPO/files/file/E-cigarettes%20in%20TRL%206_13_13.pdf