



# City of Culver City

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## Staff Report

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**CC - (1) Discussion of the Regulation of Electronic Smoking Devices (E-Cigarettes) and Flavored/Menthol Tobacco Products; and (2) Direction to the City Manager as Deemed Appropriate.**

**Meeting Date:** May 28, 2019

**Contact Person/Dept:** Heather Baker/Assistant City Attorney  
**Phone Number:** (310) 253-5660

**Fiscal Impact:** Yes ☐ No ☒

**General Fund:** Yes ☐ No ☒

**Public Hearing:** ☐ **Action Item:** ☒ **Attachments:** ☒

**Commission Action Required:** Yes ☐ No ☒ **Date:**

**Public Notification:** (E-Mail) Meetings and Agendas - City Council; Notify Me - Culver City News and Events; Stay Informed - Smoking (05/09/19, 05/20/19 and 05/22/19); (Mail) Culver City Tobacco Retailer Licensees (05/09/19); and (Publication) Culver City News (05/16/19)

**Department Approval:** Carol Schwab (05/22/19)

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### **RECOMMENDATION**

Staff recommends the City Council (1) discuss the regulation of electronic smoking devices (E-Cigarettes) and Flavored/Menthol Tobacco Products; and (2) provide direction to the City Manager as deemed appropriate.

### **BACKGROUND**

The following is a chronology of the City Council's prior discussion of E-Cigarettes:

- **August 11, 2014:** City Council discussed the regulation of E-Cigarettes and specifically whether to (1) require tobacco retailers to obtain a tobacco retailer license for the sale of E-Cigarettes; and (2) prohibit the use of E-Cigarettes in all places (or certain places) where smoking is already prohibited. At that time, the City Council determined there was a need for additional information regarding the impacts of E-Cigarettes, encouraged advocates to continue to send material, and acknowledged that the issue could be revisited at a later date.

- **August 10, 2015:** City Council amended Chapter 11.15, Tobacco Retailer Licensing, of the Culver City Municipal Code (CCMC) to amend the definitions of “tobacco paraphernalia” and “tobacco product” to specifically include electronic smoking devices and electronic smoking device paraphernalia, as it was unclear from the previous definitions as to whether these were subject to a tobacco retailer license. This amendment to CCMC Chapter 11.15 also added new definitions for “electronic smoking device” and “electronic smoking device paraphernalia.” The purpose of the amendment was to make it clear that (1) a retailer engaged in the sale of E-Cigarettes must obtain a tobacco retailer license; and (2) the sale of E-Cigarettes to minors is unlawful.
- **January 14, 2019:** Vice Mayor (then Council Member) Eriksson requested support to agendaize a general discussion of E-Cigarettes. Mayor (then Vice Mayor) Sahli-Wells mentioned she had been in discussions with the Los Angeles County Department of Public Health (LADPH) and USC professors regarding a potential ban of flavored E-Cigarettes and requested that a discussion of such a ban be incorporated into the requested agenda item. The City Council supported this request and directed the City Manager to bring this item to a future City Council meeting for discussion.

The issues of (1) regulating the smoking of E-Cigarettes (usage) and (2) regulating tobacco flavored/menthol products (retail) are distinct issues, which require amendments to different Sections of the Culver City Municipal Code. As such, staff recommends the City Council discuss, and provide direction on, each of these issues separately.

## **DISCUSSION**

### **E-CIGARETTE REGULATION**

#### ***Health Impacts***

At the time of the City Council’s discussion in 2014 staff was unable to provide the City Council with definitive answers relating to the health impacts of E-Cigarette usage, as the scientific information was limited. Since that time, a substantial amount of new information has been released from public agencies and the scientific community.

#### **California Department of Public Health (CDPH)**

In 2015, CDPH issued a Health Advisory, *Electronic Cigarettes: A Summary of the Public Health Risks and Recommendations for Health Care Professionals* (Attachment 1), discussing health risks posed by the use of E-Cigarettes which include, but are not limited to (for more detailed information see Attachment 1):

- Heated e-liquid (used in E-Cigarettes) forms an aerosol, which is absorbed through the blood stream and delivered directly to the brain and all body organs.
- In addition to nicotine, e-liquids contain other toxic chemicals known to cause cancer, birth defects and other reproductive harm.
- E-Cigarette emissions are also a health concern for those exposed to secondhand aerosol



(exposure to secondhand aerosol results in nicotine absorption at levels comparable to secondhand smoke).

- Using a nicotine-containing E-Cigarette for five minutes causes similar lung irritation, inflammation and effect on blood vessels as smoking a traditional cigarette, which may increase the risk of a heart attack.
- Exposure to and use of nicotine products by adolescents is of particular concern because it is a critical period for brain growth and development.

CDPH's *State Health Officer's Report on E-Cigarettes: A Community Health Threat* (2015) also provides additional information regarding health risks (Attachment 2).

The National Academies of Sciences, Engineering, and Medicine (NASEM)

In 2018, NASEM issued a report *Public Health Consequences of E-Cigarettes* with the following findings<sup>1</sup>:

- There is conclusive evidence that:
  - E-Cigarette use increases airborne concentrations of particulate matter and nicotine in indoor environments compared with background levels.
  - Except for nicotine, under typical conditions of use, exposure to potentially toxic substances from e-cigarettes is significantly lower compared with combustible tobacco cigarettes.
  - Exposure to nicotine from e-cigarettes is highly variable and depends on product characteristics (including device and e-liquid characteristics) and how the device is operated.
  - In addition to nicotine, most e-cigarette products contain and emit numerous potentially toxic substances.
  - Other than nicotine, the number, quantity, and characteristics of potentially toxic substances emitted from e-cigarettes are highly variable and depend on product characteristics (including device and e-liquid characteristics) and how the device is operated.
  - E-cigarette devices can explode and cause burns and projectile injuries. Such risk is significantly increased when batteries are of poor quality, stored improperly, or modified by users.
  - Intentional or accidental exposure to e-liquids (from drinking, eye contact, or dermal contact) can result in adverse health effects including but not limited to seizures, anoxic brain injury, vomiting, and lactic acidosis.
- There is substantial evidence that:
  - Nicotine intake from e-cigarette devices among experienced adult e-cigarette users can be comparable to that from combustible tobacco cigarettes.
  - E-Cigarette use increases risk of using combustible tobacco cigarettes among youth and young adults.
  - E-Cigarette aerosols can induce acute endothelial cell dysfunction, although the long-term consequences and outcomes with long-term exposure to e-cigarette aerosol are uncertain.

- E-Cigarette use results in symptoms of dependence on e-cigarettes.
- Some chemicals present in e-cigarette aerosols (e.g., formaldehyde, acrolein) are capable of causing DNA damage and mutagenesis.
- Heart rate increases shortly after nicotine intake from E-Cigarettes.

Notwithstanding the available information on the health risks of E-Cigarettes, there remains a claim they are an effective tool for smokers to quit smoking cigarettes (similar to the nicotine patch or gum). Some of the recent research has concluded E-Cigarettes are not effective smoking cessation devices, and has found that, among smokers, those using E-Cigarettes are less likely to quit smoking than persons who do not use E-Cigarettes.<sup>2</sup>

### ***Current Law***

City Regulations: Existing Culver City law does not regulate the use of E-Cigarettes; however, CCMC Chapter 11.15 requires a retailer selling E-Cigarettes to have a tobacco retailer license and prohibits the sale of E-Cigarettes to minors. The use of E-Cigarettes currently is not prohibited in areas where smoking is prohibited. Smoking is prohibited in the following areas within the City:

- City parks and recreational areas;
- Outdoor dining areas;
- Multi-unit housing; and
- Other areas where smoking is prohibited by state or federal law.

Federal and State Law: The following is an up-to-date summary of existing federal and state laws and policies that pertain to the regulation and use of E-Cigarettes:

- State law prohibits the sale (or otherwise furnishing of) E-Cigarettes to persons under 21 years of age.
- State law prohibits the use of E-Cigarettes in places where smoking is prohibited under state law (e.g. workplace).
- Federal law, which prohibits smoking on airplanes, has been interpreted to apply to E-Cigarettes.
- Certain branches of the military have policies that their existing regulations governing tobacco use apply to E-Cigarettes.
- The 2009 Family Smoking Prevention and Tobacco Control Act (“Tobacco Control Act”), which regulates the manufacturing and marketing of tobacco products, does not apply to E-Cigarettes.
- The U.S. Food and Drug Administration (FDA) has not approved E-Cigarettes for smoking cessation.

### ***Cities within Los Angeles County***

The following cities within Los Angeles County prohibit the use of E-Cigarettes in certain places:

1. Parks: A total of 42 Los Angeles County cities have adopted ordinances that prohibit E-Cigarettes in parks, including, but not limited to, the cities of:

- Beverly Hills
- Hermosa Beach
- Lawndale
- Long Beach
- Los Angeles
- Manhattan Beach
- Palos Verdes Estates
- Santa Monica
- Torrance

2. Outdoor Dining Areas: A total of 20 Los Angeles County cities have adopted ordinances that prohibit E-Cigarettes in outdoor dining areas, including, but not limited to, the cities of:

- Beverly Hills
- Hermosa Beach
- Long Beach
- Los Angeles
- Manhattan Beach
- Santa Monica

3. Multi-Unit Housing: A total of 12 Los Angeles County cities have adopted ordinances that prohibit E-Cigarettes in one or more areas of multi-unit housing, including, but not limited to, the cities of:

- Beverly Hills
- Manhattan Beach
- Santa Monica

For a complete list of cities see LADPH's matrix (Attachment 3).

### ***Policy Options and Direction***

If the City Council desires to prohibit the use of E-Cigarettes in places where smoking is prohibited, staff requests the City Council provide policy direction as to which of the following locations would be included:

1. All places where smoking is prohibited;
2. Parks and recreational areas;
3. Outdoor dining areas;
4. Multi-unit housing, and which areas (e.g. common areas, units, etc.); and
5. Other areas where smoking is prohibited by state and federal law.

### ***Enforcement***

Should the City Council wish to move forward with the consideration of an ordinance to prohibit the use of E-Cigarettes in certain areas, enforcement would be handled in the same manner as traditional smoking violations. Currently smoking violations are handled on a complaint basis and the Police Department incorporates educating the public on the law when responding. With regard to multi-unit housing, the City currently does not enforce smoking violations, but has provided residents

and others with a private right of action to enforce the City's regulations.

## RESTRICTIONS ON FLAVORED/MENTHOL TOBACCO PRODUCTS

### ***Health Impacts***

For information regarding the health impacts of E-Cigarettes, please refer to (1) the discussion in the E-Cigarettes Section of this report above; (2) The December 2018 *Surgeon General's Advisory on E-Cigarette Use Among Youth* (Attachment 4); and the discussion regarding flavored and menthol tobacco products below.

### ***Current Law***

In 2009, the Family Smoking Prevention and Tobacco Control Act ("Tobacco Control Act") gave the U.S. Food and Drug Administration (FDA) the authority to regulate tobacco products. The legislation also prohibited cigarettes that contain artificial or natural flavors (except tobacco or menthol) or an herb or spice, including strawberry, grape, orange, clove, cinnamon, pineapple, vanilla, coconut, licorice, cocoa, chocolate, cherry, or coffee, that is a characterizing flavor of the tobacco product ("characterizing flavor") to minimize the attractiveness of tobacco products to minors.

The Tobacco Control Act also established the Tobacco Products Scientific Advisory Committee (TPSAC), which was charged with developing a report assessing the impact of the use of menthol in cigarettes on public health and proposing recommendations to the FDA on whether menthol should be banned or not. The TPSAC report and recommendations were submitted to the FDA on March 18, 2011 and the report found that the availability of menthol cigarettes has an adverse impact on public health in the United States and recommended removal of menthol cigarettes from the marketplace.

Notwithstanding the TPSAC report, the FDA has not banned menthol products nor flavored *non-cigarette* tobacco products, such as cigars, cigarillos, smokeless tobacco, hookah tobacco and electronic smoking devices and the nicotine solutions used in these devices. Currently California law also does not restrict the sales of these products; however, there is pending legislation in this regard, as discussed further below.

### ***Pending Legislation***

Senate Bill 38 (SB 38): This bill, which is currently pending in the California Senate Appropriations Committee, would, among other things:

- Prohibit a tobacco retailer, or any of the tobacco retailer's agents or employees, from selling, offering for sale, or possessing with the intent to sell or offer for sale a flavored tobacco product.
- Deem a tobacco product as a flavored tobacco product if a manufacturer or any of the manufacturer's agents or employees, in the course of his or her agency or employment, has made a statement or claim directed to consumers or to the public that the tobacco product has or produces a "characterizing flavor," as defined, including, but not limited to, text, color, images, or all, on the product's labeling or packaging that are used to explicitly or implicitly communicate that the tobacco product has a characterizing flavor.

- Excludes tobacco products designed for non-electronic hookah from the meaning of flavored tobacco products.
- Defines “characterizing flavor” as any distinguishable taste or aroma, or both, other than the taste or aroma of tobacco, imparted by a tobacco product or any by product produced by the tobacco product, including, but not limited to, tastes or aromas relating to any fruit, chocolate, vanilla, honey, candy, cocoa, dessert, alcoholic beverage, menthol, mint, wintergreen, herb, or spice. Prohibits a tobacco product from being determined to have a characterizing flavor solely because of the use of additives or flavorings or the provision of ingredient information.

**FDA Actions:**<sup>3</sup> The FDA has issued several statements over the past couple of years focusing on youth access to tobacco products. Specifically, the FDA is concerned about youth access electronic smoking devices (ESDs), as the youth use rate has reached epidemic status. In various statements, the FDA commissioner signaled that most flavored tobacco products would be banned from retail locations. However, in March 2019, the FDA commissioner issued a statement announcing that manufacturers and retailers were being put on notice that they could be subject to FDA enforcement for selling certain flavored ESD products without authorization. The FDA announced it would prioritize enforcement to focus on protecting youth from becoming addicted to nicotine, which includes the retail sale of ESDs that are offered in ways that pose a greater risk for minors’ access to the products, such as retail and online sales without heightened age verification, and products that appeal to kids or that resemble non-ESD products like USB devices.

In September 2018, the FDA commissioner issued a statement stating that the FDA would not tolerate a whole generation of young people becoming addicted to nicotine as a tradeoff for enabling adults to have unfettered access to the same products. As a result, the FDA initiated a Youth Tobacco Prevention Plan that focuses on preventing youth access to tobacco products, curbing the marketing of tobacco products aimed at youth, and educating teens about the dangers of using any tobacco products. In the September 2018 statement, the FDA announced issuing 12 warning letters to companies that continued to advertise and sell products to youth. Earlier the same year the FDA had also issued 56 warning letters and six civil monetary penalties to retailers as part of its enforcement action to limit access of tobacco products to youth. The FDA also sent letters to five ESD manufacturers whose products were sold to kids during the FDA’s ramped up enforcement period. The five ESD manufacturers collectively represent more than 97% of the current market for ESDs. The FDA requested that these companies provide robust plans on how they will address the widespread use of their products by minors or face increased enforcement.

### ***Flavored Tobacco Products***

In addition to the FDA’s warnings about flavored tobacco products, the U.S. Surgeon General has also opined that flavored tobacco products are considered to be starter products that help establish smoking habits that can lead to long-term addiction; flavors, including menthol, make it harder for users to quit; and smokers starting at a young age are more likely to develop a severe nicotine addiction.

The CDPH has also published informational bulletins *The Truth About Flavored Tobacco* and *Flavored Tobacco Products Fact Sheet* (collectively, Attachment 5), which discuss many of the issues relating to the use of flavors in E-Cigarettes, including:

- Sweet flavors (e.g. watermelon, cherry, chocolate, mint and gummy bear) appeal to kids and teens.
- Flavorings mask the harsh taste of tobacco, making it easier for youth to initiate tobacco use.
- Current marketing of flavored tobacco products is targeted at youth:
  - Products similar to popular candy brands, such as Jolly Rancher, Kool-Aid and Life Savers; and
  - Colorful packaging and smaller, low costs packages available for purchase.
- Serious health risks from nicotine and flavored e-liquids.
- Flavoring chemicals E-Cigarettes have been linked to severe respiratory disease.

### ***Menthol Tobacco Products***

As discussed above, although the FDA banned flavors in cigarettes, it excluded menthol flavoring from such ban. As with other flavors, menthol appeals to young and beginning smokers and makes it harder to quit smoking, according to the CDPH's information bulletin *The Truth About Menthol Cigarettes* (Attachment 6). CDPH has also found menthol is easier to inhale and allows smokers to inhale more deeply, which causes harmful particles to settle deeper inside the lungs.

According to CDPH and the scientific community, in addition to the impacts of menthol products on the youth population, there appears to be a disproportionate marketing of menthol flavors to, and use by, minority groups, including African Americans and LGB communities:<sup>4</sup>

- Among adult smokers in California, 18% of white cigarette smokers smoke menthol cigarettes, whereas 70% of African American cigarette smokers use menthol. Additionally, almost 50% of LGB smokers use menthol cigarettes compared to 28% of straight smokers.
- Among Hispanic/Latino current adult smokers in the US, 46% smoke menthol cigarettes.
- Among Hispanic/Latino young adult current smokers (aged 18-25) in the US from 2008 to 2010, 47.3% smoked menthol cigarettes.
- Between 2008-2010 and 2012-2014, the largest increase in menthol cigarette use among race/ethnic groups was in found in Hispanic smokers (rising 9.8%).
- Studies have shown negative associations among menthol cigarette use and successful cessation in Hispanic communities.

Please also see Attachment 6 for further discussion of menthol products.

### ***National and Local Data on E-Cigarette Use Among Youth***

#### National Data:

- According to data from the Centers for Disease Control and Prevention (CDC), in 2011 less than 2% of high school students (220,000) reported using E-Cigarettes. In 2018, three million (3,000,000) high school students reported being current users, a rise of 78% from the previous year. Also in 2018, about 5% of middle school students (570,000) reported using E-Cigarettes, a rise of 48% from the prior year.<sup>5</sup>
- 80% of young people who have ever used tobacco started with a flavored product.<sup>6</sup>

### Local Data:<sup>7</sup>

- Data from the California Healthy Kids survey found that 14% of 11th graders at Culver City High School reported current E-Cigarette use. Reports from teachers at the middle school cite a growing number of middle schoolers using E-Cigarettes.
- Data from the survey of Culver City students found that almost 70% of 9th and 11th graders thought that E-Cigarettes were easy to obtain, and approximately 1 out of 4 thought that E-Cigarettes posed little health risk.

### ***Policy Options***

In considering whether to restrict the sale of flavored and/or menthol tobacco products, the City Council has several options:

1. Complete Prohibition: This option would encompass a complete ban of all “characterizing flavors,” with no exemptions for menthol products, and is considered the “gold standard” by public health agencies (including CDPH, and LADPH). Approximately 23 cities and counties in California have opted to completely prohibit all flavored and menthol tobacco products including, but not limited to:

- Alameda
- Berkeley\*
- Beverly Hills
- Contra Costa County
- Marin County
- San Francisco
- San Mateo County
- West Hollywood\*\*
- Yolo County

\* ban is not city-wide, but within 600 feet of a school (public and private K-12 with at least 25 students enrolled)

\*\* ban is not city-wide, but within 600 feet of a youth-populated area (school, youth center, child-care facility, etc.)

2. Exemption for Menthol: This partial ban would prohibit the sale of all flavored tobacco products, with the exception of menthol. Public health agencies do not consider such an exemption to be a best practice. Approximately 10 cities and have opted for a menthol exception in their regulations including, the City of Manhattan Beach.
3. Permissible in Adults-Only Establishments: Another option is to prohibit the sale of all flavored and menthol tobacco products by tobacco retailers within the City, with the exception of adults-only establishments. This too is not considered to be a best practice by public health agencies. Some cities have paired this exemption with an exemption for menthol products. Cities and counties that have opted to allow adults-only establishments to continue to sell flavored/menthol tobacco products, while banning them elsewhere include:

- Hermosa Beach\*
- Los Gatos
- Manhattan Beach\*\*
- Oakland
- Palo Alto

\* On May 14, 2019, Hermosa Beach City Council introduced an ordinance to delete the exemption for adults-only establishments.

\*\* Manhattan Beach also has an exemption for menthol tobacco products.

For a complete list of cities, please see the American Lung Association matrix (Attachment 7).

### ***Policy Direction***

If the City Council desires to move forward with regulating flavored and/or menthol flavored tobacco products, staff requests the City Council provide direction on the following:

1. Should the regulations include a ban on flavored tobacco products?
  - A. Cigarettes only
  - B. Both cigarettes and non-cigarette products
2. Should the regulations include a ban on menthol tobacco products?
  - A. Cigarettes only
  - B. Both cigarettes and non-cigarette products
3. Should the ban be city-wide, or limited to certain areas? If limited, which areas should the ban cover?
  - A. City-wide, except adults-only establishments
  - B. Prohibited only within a certain distance of a school
  - C. Prohibited only within a certain distance of a youth populated area (this includes schools)
  - D. Other

Note: Prohibitions within limited areas may be difficult and time consuming to enforce.

Once policy direction is received, staff will return to a future City Council meeting with a proposed ordinance amending CCMC Chapter 11.15.

### ***Enforcement***

CCMC Section 11.15.040 (Compliance Monitoring and Enforcement), provides the following:

*Compliance with the provisions of this Chapter shall be monitored by the Finance Department, Police Department and/or Enforcement Services Division, including any authorized designee of such departments and division, and/or by any other person or persons so designated by the City Manager.*



Currently, due to limited resources, enforcement of the tobacco retailer licensees is handled on a complaint basis. If the City receives a complaint that tobacco products are being sold by a retailer that does not have a valid tobacco retailer license, the Finance Department will contact the retailer and require they apply for a Permit. Similarly, if the City receives a complaint that a tobacco retailer is selling to minors, the Police Department will get involved and issue a citation if warranted. As of this date, the City has not received any complaints of tobacco retailers operating in violation of the City's regulations.

Enforcement of restrictions on the sale of flavored and/or menthol tobacco products would be folded into enforcement of the current regulations pertaining to tobacco retailer licensees. If the City Council provides direction to return with an ordinance restricting the sale of flavored and/or menthol tobacco products, City staff would work with the Finance and Police Departments to re-evaluate the tobacco retailer license fee and request City Council consider a related fee increase, if warranted, to cover the cost of any additional enforcement required.

## **FISCAL ANALYSIS**

There is no fiscal impact to the discussion of this item. Should the City Council provide policy direction as to potential regulations, the fiscal impact of such regulations will be included when the item returns to City Council for consideration.

## **ATTACHMENTS**

1. 2015 CDPH Health Advisory, *Electronic Cigarettes: A Summary of the Public Health Risks and Recommendations for Health Care Professionals*
2. 2015 State Health Officer's Report on E-Cigarettes: *A Community Health Threat*
3. Los Angeles cities matrix regarding E-Cigarettes usage regulations
4. 2018 Surgeon General's Advisory on E-Cigarette Use Among Youth
5. CDPH Bulletins, *The Truth About Flavored Tobacco and Flavored Tobacco Products Fact Sheet*
6. CDPH Bulletin, *The Truth About Menthol Cigarettes*
7. Cities/counties matrix regarding flavored/menthol tobacco product regulation

## **MOTION**

That the City Council:

1. Discuss the regulation of E-Cigarettes;
2. Discuss restrictions on Flavored/Menthol Tobacco Products; and

3. Provide Direction to the City Manager on each of these issues as deemed appropriate.

## NOTES

- <sup>1</sup> National Academies of Sciences, Engineering, and Medicine. (2018). *Public health consequences of e-cigarettes*. National Academies Press.  
<https://www.nap.edu/read/24952/chapter/2#6> <<https://www.nap.edu/read/24952/chapter/2>>
- <sup>2</sup> Barrington-Trimis et al. *E-cigarette Use and Subsequent Smoking Frequency Among Adolescents*. Pediatrics. 2018;142; Kalkhoran S, Glantz SA. *E-cigarettes and smoking cessation in real-world and clinical settings: a systematic review and meta-analysis*. The Lancet Respiratory Medicine. 2016;4(2):116-28.
- <sup>3</sup> Senate Rules Committee, Office of Senate Floor Analysis, Third Reading, SB 38 Analysis, May 17, 2019
- <sup>4</sup> Keck School of Medicine of USC, *Flavor and Menthol Tobacco Products and E-cigarettes*, May 22, 2019.
- <sup>5</sup> Notes from the Field: *Use of Electronic Cigarettes and Any Tobacco Product Among Middle and High School Students* - United States, 2011-2018 MMWR Weekly/November 16, 2018 / 67 (45);1276-1277  
[https://www.cdc.gov/mmwr/volumes/67/wr/mm6745a5.htm?s\\_cid=mm6745a5\\_e](https://www.cdc.gov/mmwr/volumes/67/wr/mm6745a5.htm?s_cid=mm6745a5_e)
- <sup>6</sup> Truth Initiative, 3/16/17. *Widespread use of flavored products in young tobacco users*. Available: <https://truthinitiative.org/research/widespread-use-flavored-products-young-tobacco-users>
- <sup>7</sup> Culver City Unified School District. *California Healthy Kids Survey*, 2018-19: Main Report. San Francisco: WestEd Health and Justice Program for the California Department of Education.



# HEALTH ADVISORY – January 28, 2015

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## Electronic Cigarettes: A Summary of the Public Health Risks and Recommendations for Health Care Professionals

This health advisory seeks to inform health care professionals of the public health risks posed by the marketing, sale and use of electronic cigarettes (e-cigarettes) especially to children and young people. Electronic cigarettes (e-cigarettes) are battery-operated devices, often designed to resemble a cigarette, that deliver and emit a nicotine-containing aerosol. E-cigarettes are considered electronic nicotine delivery devices (ENDS) and have many names. They are frequently referred to as e-cigs, e-hookahs, hookah pens, vapes, vape pens, vape pipes, or mods. There are disposable and rechargeable e-cigarettes as well as refillable “tank systems” that hold a larger volume of the e-cigarette liquid (e-liquid) and that heat the e-liquid to higher temperatures.<sup>1</sup>

### Toxicity of E-cigarettes and Exposure to Emissions

The heated e-liquid forms an aerosol that contains high concentrations of ultrafine particles that are inhaled and become trapped in the lungs.<sup>2</sup> Chemicals in the aerosol are absorbed through the blood stream and delivered directly to the brain and all body organs. Analyses of e-liquids by the Food and Drug Administration (FDA) and other laboratories found variability in the content of e-liquids and inaccurate product labeling related to nicotine content and chemicals.<sup>3</sup>

Typically, e-liquids contain nicotine, flavoring agents, propylene glycol and toxic chemicals known to cause cancer, birth defects and other reproductive harm.<sup>1, 4-7</sup> While several studies found lower levels of carcinogens in the e-cigarette aerosol compared to smoke emitted by traditional cigarettes, both the mainstream and secondhand e-cigarette aerosol have been found to contain at least ten chemicals that are on California’s Proposition 65 list of chemicals known to cause cancer, birth defects or other reproductive harm, including acetaldehyde, benzene, cadmium, formaldehyde, isoprene, lead, nickel, nicotine, n-nitrosornicotine, and toluene.<sup>1, 5-7</sup>

E-cigarette emissions are also a health concern for those exposed to the secondhand aerosol. Although not as dangerous as secondhand smoke from combustible tobacco products, people exposed to e-cigarette aerosol absorb nicotine at levels comparable to people exposed to secondhand smoke.<sup>8</sup> E-cigarette emissions also contain volatile organic compounds (VOCs) and fine/ultrafine particles.<sup>6</sup> These ultrafine particles can travel deep into the lungs where they get trapped and may lead to tissue inflammation.<sup>9</sup>

## Health Effects of Nicotine

Nicotine, the primary psychoactive ingredient in e-liquid, stimulates pleasure/reward pathways in the brain. It is a highly addictive neurotoxin that is as addictive as heroin and cocaine.<sup>10, 11</sup> It affects the cardiovascular and central nervous systems, causing blood vessels to constrict, raising the pulse and blood pressure.<sup>12</sup> Nicotine adversely affects maternal and fetal health during pregnancy, contributing to low birth weight, preterm delivery and stillbirth.<sup>13</sup> Nicotine is also known to cross the placenta and is detectable in the breast milk of smoking mothers as well as mothers exposed to secondhand smoke.<sup>14, 15</sup> Preliminary studies show that using a nicotine-containing e-cigarette for just five minutes causes similar lung irritation, inflammation and effect on blood vessels as smoking a traditional cigarette, which may increase the risk of a heart attack.<sup>1, 9</sup>

Exposure to and use of nicotine products by adolescents is of particular concern because adolescence is a critical period for brain growth and development. As a consequence, adolescents are especially vulnerable to the toxic effects of nicotine. Exposure to nicotine during adolescence may harm brain development and predispose future tobacco use.<sup>13, 16, 17</sup> Even a brief period of continuous or intermittent nicotine exposure in adolescence elicits lasting neurobehavioral damage.<sup>18</sup>

## Nicotine Poisonings

E-liquids are available in flavors such as bubble gum, cherry and chocolate, which makes them appealing to children and youth. E-cigarette cartridges and e-liquid bottles are not equipped with child resistant caps and often leak, creating a potential source of poisoning through ingestion and skin or eye contact. Even a small amount of e-liquid ingested by a small child can be lethal.<sup>19</sup>

There has been a significant rise in the number of calls to poison control centers for both adults and children who were accidentally exposed to e-liquids.<sup>20</sup> Nationally, the number of calls rose from one per month in September 2010 to 215 per month in February 2014.<sup>21</sup> Figure 1 depicts e-cigarette-related calls to the California Poison Control Center over a five year period. In California, from 2012 to 2014, the number of calls to the poison control center

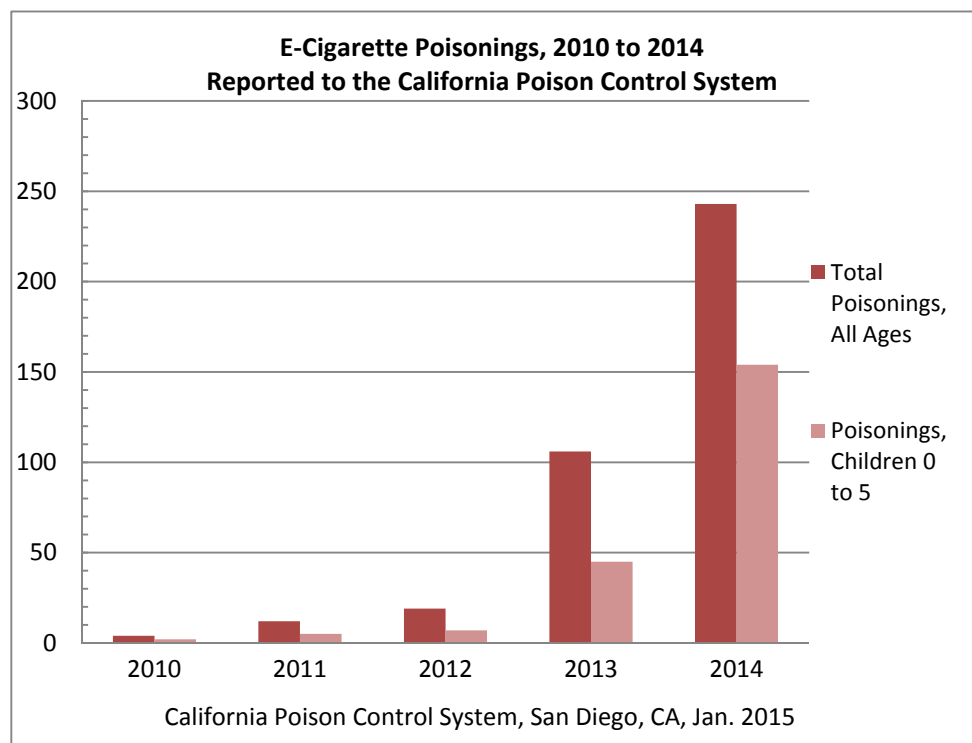


Figure 1: E-cigarette-related calls to the California Poison Control System.

involving e-cigarette exposures in children five and under increased sharply from 7 to 154. By the end of 2014, e-cigarette poisonings to young children tripled in one year, making up more than 60% of all e-cigarette poisoning calls. Adults have also mistakenly used e-liquid in harmful ways, such as eye drops, and have been harmed by exploding cartridges.

### **E-cigarette Use and Youth**

Recent national and preliminary California data show that youth are experimenting with e-cigarettes at an alarming rate. In 2014, the Monitoring the Future survey, which tracks substance abuse trends among over 40,000 youth nationally, found that the use of e-cigarettes among teens surpassed the use of traditional cigarettes. More than twice as many 8<sup>th</sup> and 10<sup>th</sup> graders reported using e-cigarettes than traditional cigarettes in the survey, and among 12<sup>th</sup> graders, 17 percent reported currently using e-cigarettes vs. 14 percent using traditional cigarettes.<sup>22</sup> Another survey, the National Youth Tobacco Survey, found that in 2013, that e-cigarette use among high school students tripled between 2011 and 2013, increasing from 1.5 percent to 4.5 percent.<sup>23</sup> Over a quarter million students who reported using e-cigarettes had never used traditional cigarettes.<sup>24</sup> Overall, studies suggest that youth who may have otherwise never smoked cigarettes are now getting hooked on nicotine due to e-cigarettes, and that adolescents who use e-cigarettes are more likely to progress from experimenting with cigarettes to becoming established smokers.<sup>25, 26</sup>

E-cigarette devices may also be used to inhale illegal substances, such as marijuana and hash oil.<sup>19</sup> Because many of these devices are similar in appearance to a ball point pen, school and law enforcement personnel are unaware that inappropriate use of nicotine and illegal substances is occurring.

### **E-cigarette Use and Adults**

Among California adults, use of e-cigarettes in the past 30 days doubled from 1.8 percent in 2012 to 3.5 percent in 2013. For younger adults (18 to 29 year old), e-cigarette use tripled in one year from 2.3 percent to 7.6 percent. Young adults are three times more likely to use e-cigarettes than those 30 and older. Nearly 20 percent of young adult e-cigarettes users have never smoked traditional cigarettes.<sup>27</sup>

### **E-cigarette Availability**

E-cigarettes are readily accessible throughout California, and the number of stores selling e-cigarettes quadrupled between 2011 and 2013, increasing from 12 percent to 46 percent.<sup>28, 29</sup> Figure 2 depicts the percent of tobacco stores selling e-cigarettes in California counties.

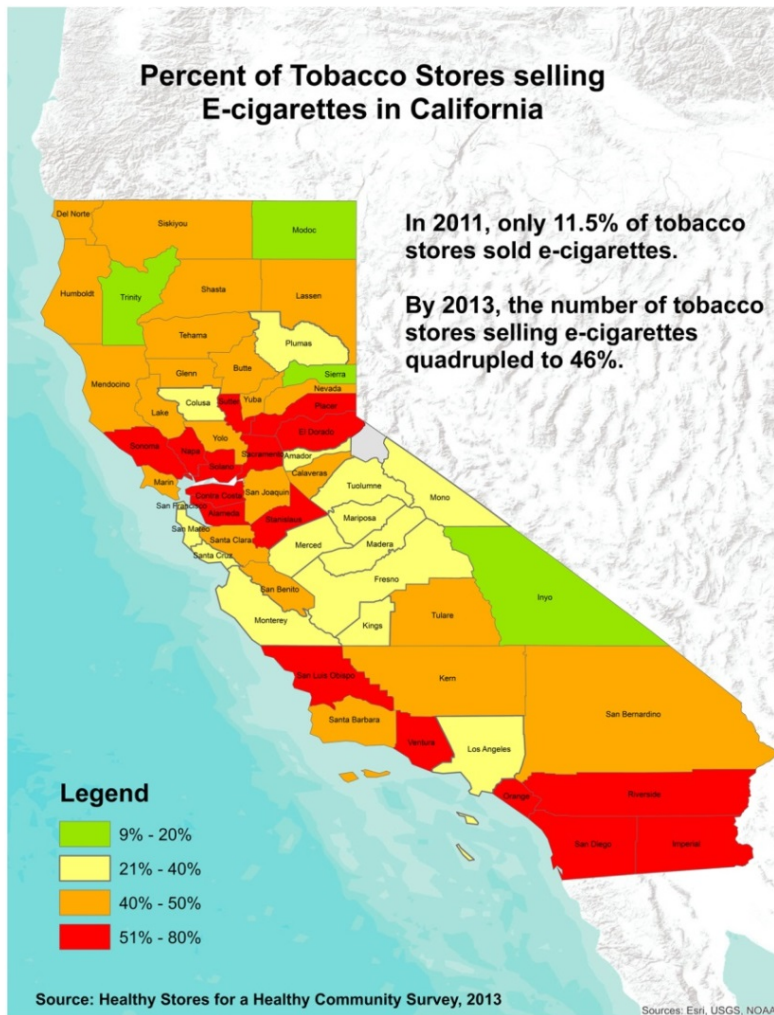


Figure 2: Percent of tobacco stores selling e-cigarettes in CA.

## E-cigarette Marketing

Over the past 40 years, great strides have been made to protect youth from tobacco marketing. Numerous state and federal laws and litigation regulate the sale, marketing and distribution of traditional tobacco products and tobacco-related paraphernalia. These restrictions include: prohibiting tobacco advertising on television, radio and billboards; prohibiting youth-oriented tobacco products marketing, including a ban on the sale of flavored cigarettes and the use of cartoon characters; prohibiting free sampling of cigarettes and restrictions on sampling of other tobacco products; restrictions on brand name sponsorship of sporting, music, and cultural events; restrictions on giving away branded promotional items such as t-shirts.<sup>30</sup> Presently in California, these restrictions are not interpreted to apply to e-cigarettes. As a result, the e-cigarette industry is legally allowed to use marketing strategies and tactics that are no longer permissible for traditional tobacco products.

Many television networks (e.g., ABC Family, USA, Bravo, E!, MTV, VH1 and Comedy Central) with a substantial proportion of youth viewers, are airing e-cigarette advertising. There is also e-cigarette advertising on radio, internet, billboards, in magazine and print publications, and in stores.<sup>31</sup> E-liquid containing nicotine is frequently marketed as “e-juice” and is sold in fruit and candy flavors. Promoting and labeling nicotine containing products as “juice” may mislead consumers to believe that e-liquid is safe to ingest and that e-cigarettes pose no health risk.





The use of cartoon characters in advertising and promoting of e-cigarettes as fashion accessories are other ways these products appeal to youth with the implication that these products are harmless (see Figure 3). E-cigarette manufacturers report sponsoring concerts, sporting events, and parties that include the distribution of free samples; many of these events occurred in California.<sup>32</sup> Another tactic to create a perception that e-cigarettes are family friendly is through the association of these products with family oriented attractions.



Figure 3: E-cigarette products and accessories.

## Cessation Claims

There is no scientific evidence that e-cigarettes help smokers to successfully quit traditional cigarettes or that they reduce consumption of traditional cigarettes.<sup>25, 33</sup> A number of recent studies show that e-cigarette users are no more likely to quit than regular smokers. One study found that 89 percent of e-cigarette users are still using them one year later and another study found that e-cigarette users are a third less likely to quit cigarettes.<sup>34, 35</sup> These studies suggest that e-cigarettes are effectively inhibiting people from successfully kicking their nicotine addiction. In addition, dual use of cigarettes and e-cigarettes is continuing to rise, which may diminish any potential benefits of cutting back on traditional cigarettes.<sup>36</sup> Continuing to smoke traditional cigarettes, while also using e-cigarettes, does not reduce the cardiovascular health risks.<sup>1, 37, 38</sup>

## California health care providers are recommended to:

### ***Educate, Advise and Protect Unborn Children, Young Children and Adolescents.***

- Educate parents, adolescents, and the public, as well as health care personnel, school personnel, child care providers, and community leaders, about these products:
  - Nicotine is contained and is highly addictive and toxic
  - Increases in e-cigarette related poisonings, especially to children.
- Advise that these products are especially harmful to adolescents and pregnant women.
- Advise and warn e-cigarette users about toxicity of these products to themselves and those subjected to secondhand emissions.

### ***Educate About Clean Indoor Air.***

- Educate parents and the public to take steps to protect children and themselves from exposure to e-cigarette emissions.

### ***Encourage Cessation.***

- Current smokers and e-cigarette users should be advised to quit and offered support.
- Refer users to cessation resources offered by their health insurance plan including access to FDA approved cessation medications.
- The California Smokers' Helpline at 1-800-NO BUTTS is another cessation resource.

### ***Protect Children from Nicotine Poisoning.***

- Inform parents and e-cigarette users that e-cigarette cartridges and e-liquid bottles are a potential source of poisoning through ingestion, skin or eye contact. Store these materials out of the reach of children, away from medications, and call the California Poison Control Center at 1-800-222-1221 for expert help in case of accidental exposure.

### ***Promote Health Literacy: Educate about Misleading Marketing.***

- Educate parents and e-cigarette users about misleading advertising and labeling.
- Educate adolescents, parents and others about unknown ingredients and rights as consumers to have ingredient disclosure readily accessible.



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# State Health Officer's Report on E-Cigarettes

*A Community  
Health Threat*





# State Health Officer's Report on E-Cigarettes

## *A Community Health Threat*

Ron Chapman, MD, MPH  
CDPH Director and State Health Officer  
California Department of Public Health

January 2015

Edmund G. Brown Jr., Governor  
State of California

Diana S. Dooley, Secretary  
California Health and Human Services Agency



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# Introduction from the State Health Officer

As the California Department of Public Health (CDPH) Director and State Health Officer, I am pleased to present CDPH's second issue of the State Health Officer's Report which focuses on electronic cigarettes (e-cigarettes). While there is still much to be learned about the individual and public health impact of e-cigarette use, this report provides factual information about e-cigarettes, the marketing of these products, and the public health concerns related to their use. It outlines a number of steps to protect children from nicotine poisoning, adolescents from nicotine addiction, and non-users from exposure to the toxic aerosol emitted from e-cigarettes.



Ron Chapman, MD, MPH  
CDPH Director and State Health Officer

As the State Health Officer, of particular concern to me is the impact of e-cigarettes on the health and safety of children, teens, and young adults. The availability of e-cigarettes in a variety of candy and fruit flavors such as cotton candy, gummy bear, chocolate mint, and grape makes these products highly appealing to young children and teens. The use of marketing terms such as “e-juice” may further mislead consumers into believing that these products are harmless and safe for consumption.

Among children ages 0 to 5 years old, e-cigarette poisonings increased sharply from 7 in 2012 to 154 in 2014. By the end of 2014, e-cigarette poisonings to young children tripled in one year, making up more than 60 percent of all e-cigarette poisoning calls.

E-cigarette use is rapidly rising among teens and young adults. Nationally, the use of e-cigarettes by high school students tripled in just two years and e-cigarette use by teens now surpasses the use of traditional cigarettes. With this age group the long-term impact that nicotine has on adolescent brain development is of particular concern. In California, use among young adults ages 18 to 29 tripled in one year. While the long term health impact resulting from use of this product by this population is presently unknown – it is known that e-cigarettes emit at least 10 chemicals that are found on California's Proposition 65 list of chemicals known to cause cancer, birth defects, or other reproductive harm. Comprehensive steps taken now can prevent a new generation of young people from becoming addicted to nicotine, avoid future health disparities and avert an unraveling of California's approximately \$2 billion, 25-year investment in public health efforts to prevent and reduce tobacco use in California.

This report highlights several steps to address the health and safety issues related to e-cigarette use. First and foremost, education is needed to counter the marketing of e-cigarettes which is often misleading and highly appealing to teens. Second, there is a need to treat e-cigarettes in a comprehensive manner

that is consistent with how we approach traditional cigarettes. Existing laws that currently protect minors and the general public from traditional tobacco products should be extended to cover e-cigarettes. Third, immediate action is needed to protect children and workers from the toxicity associated with unintentional exposure and handling of e-liquid and the toxic aerosol emitted from e-cigarettes.

I trust that this report provides you with new information and that you will join me in this effort to protect our communities.

Sincerely,

A handwritten signature in black ink, appearing to read "Ron Chapman", written in a cursive style.

**Ron Chapman, MD, MPH**

CDPH Director and State Health Officer

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# Executive Summary

While there is still much to be learned about the ingredients and the long-term health impacts of e-cigarettes, this report provides Californians with information on e-cigarette use, public health concerns related to e-cigarettes, and steps that can be taken to address the growing use of these products. The following are key highlights from the report:

## E-Cigarette Use

- In 2014, teen use of e-cigarettes surpassed the use of traditional cigarettes for the first time, with more than twice as many 8th and 10th graders reporting using e-cigarettes than traditional cigarettes. Among 12th graders, 17 percent reported currently using e-cigarettes vs. 14 percent using traditional cigarettes.
- In California, adults using e-cigarettes in the past 30 days doubled from 1.8 percent in 2012 to 3.5 percent in 2013. For younger adults (18 to 29 years old), e-cigarette use tripled in only one year from 2.3 percent to 7.6 percent.
- Young adults are three times more likely to use e-cigarettes than those 30 and older.
- Nearly 20 percent of young adult e-cigarette users in California have never smoked traditional cigarettes.

## Health Effects of E-Cigarettes

- E-cigarettes contain nicotine, a highly addictive neurotoxin.
- Exposure to nicotine during adolescence can harm brain development and predispose youth to future tobacco use.
- E-cigarettes do not emit water vapor, but a concoction of chemicals toxic to human cells in the form of an aerosol. The chemicals in the aerosol travel through the circulatory system to the brain and all organs.
- Mainstream and secondhand e-cigarette aerosol has been found to contain at least ten chemicals that are on California's Proposition 65 list of chemicals known to cause cancer, birth defects, or other reproductive harm.

## Heightened Concern for Youth

- The variety of fruit and candy flavored e-cigarettes entice small children who may accidentally ingest them. Even a fraction of e-liquid may be lethal to a small child.
- E-cigarette cartridges often leak and are not equipped with child-resistant caps, creating a potential source of poisoning through ingestion and skin or eye contact.
- Calls to poison control centers in California and the rest of the U.S. have risen significantly for both adults and children accidentally exposed to e-liquids.
- In California, the number of calls to the poison control center involving e-cigarette exposures in children five and under tripled in one year.



## Harm Reduction Claims and Myths

- There is no scientific evidence that e-cigarettes help smokers successfully quit traditional cigarettes.
- E-cigarette users are no more likely to quit than regular smokers, with one study finding 89 percent of e-cigarette users still using them one year later. Another study found that e-cigarette users are a third less likely to quit cigarettes.

## Unrestricted Marketing

- In three years, the amount of money spent on advertising e-cigarettes increased more than 1,200 percent.
- E-cigarette advertisements (ads) are on television (TV) and radio where tobacco ads were banned more than 40 years ago. Most of the methods being used today by e-cigarette companies were used long ago by tobacco companies to market traditional cigarettes to kids.
- Many ads state that e-cigarettes are a way to get around smoking bans, which undermines smoke free social norms. Various tactics and claims are also used to imply that these products are safe.
- The fact that e-cigarettes contain nicotine, which is highly addictive, is not typically included in e-cigarette advertising.

## In Conclusion

California has been a leader in tobacco use prevention and cessation for over 25 years, with one of the lowest youth smoking rates in the nation. The promotion and increasing use of e-cigarettes threaten California's progress. These data suggest that a new generation of young people will become addicted to nicotine, accidental poisonings of children will continue, and involuntary exposure to secondhand aerosol emissions will impact the public's health if e-cigarette marketing, sales and use continue without restriction. Additionally, without action, it is likely that California's more than two decades of progress to prevent and reduce traditional tobacco use will erode as e-cigarettes re-normalize smoking behavior.

# The Problem: E-cigarettes

E-cigarettes are battery-operated devices, often designed to resemble cigarettes, which deliver a nicotine containing aerosol, not just water vapor. E-cigarettes have many names, especially among youth and young adults, such as e-cigs, e-hookahs, hookah pens, vapes, vape pens, vape pipes, or mods.

E-cigarettes were first introduced in the U.S. in 2007 and have skyrocketed in popularity, availability, and variety. From disposable and rechargeable e-cigarettes to “tank systems” that can hold a large volume of a liquid solution (e-liquid), customers can modify e-cigarettes in many ways.<sup>1</sup>

## A Significant Public Health Concern

Unlike traditional cigarettes where the tobacco leaf is burned and the resulting smoke inhaled, e-cigarettes heat e-liquid that generally contains nicotine, flavorings, additives, and propylene glycol. The heated e-liquid forms an aerosol, not just water vapor, that is inhaled by the user. The aerosol has been found to contain toxic chemicals like formaldehyde, lead, nickel, and acetaldehyde all of which are found on California’s Proposition 65 list of chemicals known to cause cancer, birth defects, and other reproductive harm.<sup>2-4</sup> These chemicals travel through the circulatory system to the brain and all organs. The aerosol also contains high concentrations of ultrafine particles that are inhaled and become trapped in the lungs.<sup>5</sup>

E-liquids are available in thousands of candy and fruit flavors, including bubble gum, cherry and chocolate, which are especially appealing to youth and small children who may accidentally ingest them. Even a small amount of e-liquid may be lethal to a small child.<sup>6</sup> In addition, e-cigarette cartridges often leak and are not equipped with child-resistant caps, creating a potential source of poisoning through ingestion and skin or eye contact.

There has been a significant rise in the number of calls to poison control centers in California and nationally for both adults and children who were accidentally exposed to e-liquids, many of whom are children aged five and under.<sup>7</sup> Nationally, the number of calls rose from one per month in September 2010 to 215 per month in February 2014.<sup>8</sup> In California, from 2012 to 2013, the number of calls to the poison control center involving e-cigarette exposures in children ages five and under increased sharply from 7 to 154. By the end of 2014, e-cigarette poisonings to young children tripled in one year, making up more than 60% of all e-cigarette poisoning calls (see Figure 1). Adults have also mistakenly used e-liquid in harmful ways, such as eye drops, and have been harmed by exploding cartridges and burning batteries.

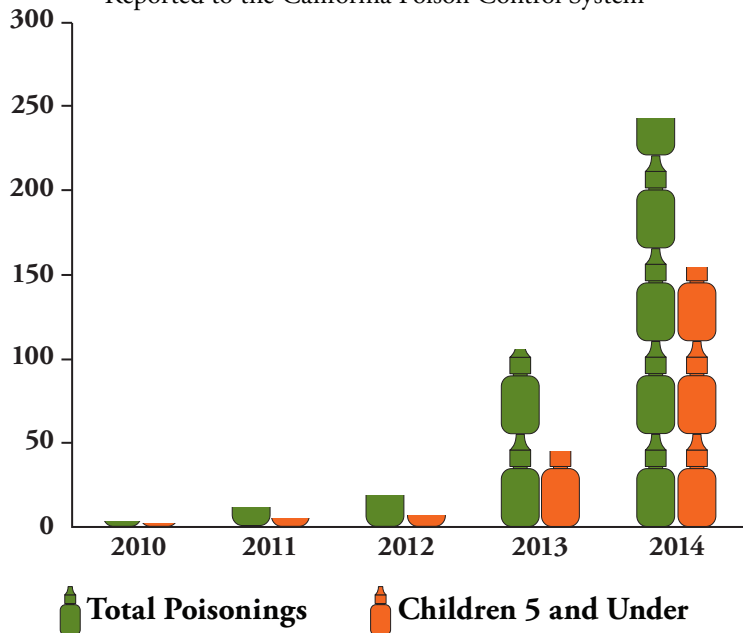
School and law enforcement officials have reported that e-cigarette devices are also used to inhale illegal substances, such as marijuana and hash oil.<sup>6</sup> Because many of these devices are similar in appearance to a ball point pen, school and law enforcement personnel are not aware that inappropriate use of nicotine and illegal substances is occurring.



Figure 1

## E-Cigarette Poisonings, 2010-2014

Reported to the California Poison Control System



California Poison Control System, San Diego, CA, Jan. 2015

Despite the lack of manufacturing standards, quality control, and external oversight by a federal regulatory agency of e-cigarettes, they are heavily marketed, widely available, and a significant public health concern.

## E-Cigarette Use by Youth

Aggressive marketing has led to an increase in e-cigarette use and experimentation by youth. Many are concerned that e-cigarettes are a gateway to using traditional cigarettes.<sup>9</sup> Research suggests that kids who may have otherwise never smoked cigarettes are now becoming addicted to nicotine through the use of e-cigarettes and other e-products.<sup>9</sup> An analysis of the 2011-2012 National Youth

Tobacco Survey (NYTS) found that adolescents who used e-cigarettes were more likely to progress from experimenting with traditional cigarettes to becoming established smokers and were less likely to quit.<sup>9</sup>

In 2014, for the first time ever, teen use of e-cigarettes surpassed the use of traditional cigarettes. The Monitoring the Future study, which tracks substance abuse trends among 40,000 youth nationally, found that among 8th and 10th graders, current e-cigarette use was double that of traditional cigarettes (8.7 percent vs. 4 percent for 8th graders and 16.2 percent vs. 7.2 percent for 10th graders). Among 12th graders, 17.1 percent reported current e-cigarette use vs. 13.6 percent traditional cigarette use.<sup>10</sup> This 2014 finding that e-cigarette use exceeds traditional cigarette use among teens comes on the heels of the 2013 NYTS which found that e-cigarette use tripled among high school students, increasing from 1.5 percent in 2011 to 4.5 percent in 2013.<sup>11</sup> An analysis of the 2011- 2013 NYTS also reported that more than a quarter million youth who had never smoked a traditional cigarette used e-cigarettes in 2013, a three-fold increase since 2011, and that youth who had used e-cigarettes were nearly twice as likely to try traditional cigarettes as those who never used e-cigarettes.<sup>12</sup>

In California, preliminary data of more than 430,000 middle and high school students from the California Healthy Kids Survey found that in 2013, 6.3 percent of 7th graders, 12.4 percent of 9th graders, and 14.3 percent of



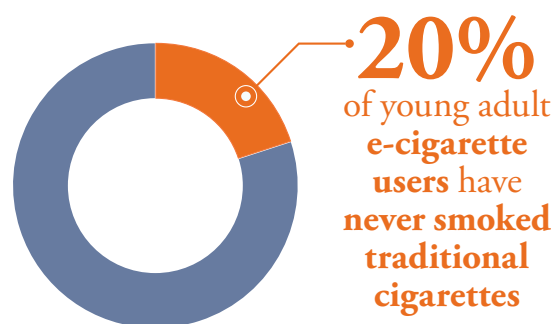


11th graders had used e-cigarettes in the past 30 days. In all instances, California teens were found to use e-cigarettes at much higher rates than traditional cigarettes. The survey data also show that 11.4 percent of 7th graders, 23.6 percent of 9th graders, and 29.3 percent of 11th graders have ever tried e-cigarettes.<sup>13</sup> While the California Healthy Kids Survey is not representative of all California youth, the large sample size and consistency with the recent national data and data from other U.S. states, specifically Minnesota and Hawaii, suggest that California youth are experimenting with e-cigarettes at a rapidly increasing rate.<sup>14, 15</sup>

## E-Cigarette Use by Adults

Nationally, 8.1 percent of adults have tried e-cigarettes

while 1.4 percent were current users in 2012.<sup>16</sup> New California data shows that adults using e-cigarettes in the past 30 days also doubled from 1.8 percent in 2012 to 3.5 percent in 2013. For young adults (18 to 29 year old), e-cigarette use tripled in only one year from 2.3 percent to 7.6 percent. Young adults are three times more likely to use e-cigarettes than those 30 and older. Nearly 20 percent of young adult e-cigarette users have never smoked traditional cigarettes.<sup>17</sup>



## Health Effects of Nicotine

In 1990, the Office of Environmental Health Hazard Assessment of the California Environmental Protection Agency added nicotine to the Proposition 65 list of chemicals known to cause cancer, birth defects, or reproductive harm.<sup>4</sup>

Nicotine is a highly addictive neurotoxin, proven as addictive as heroin and cocaine.<sup>18</sup> Nicotine affects the cardiovascular and central nervous systems, causing blood vessels to constrict, raising the pulse and blood pressure.<sup>19</sup> Nicotine adversely affects maternal and fetal health during pregnancy, contributing to low birth weight, preterm delivery, and stillbirth.<sup>20</sup> Nicotine is also known to cross the placenta and

is detectable in the breast milk of smoking mothers as well as mothers exposed to secondhand smoke.<sup>21, 22</sup>



Preliminary studies have shown that using a nicotine-containing e-cigarette for just five minutes causes similar lung irritation, inflammation, and effect on blood vessels as smoking a traditional cigarette, which may increase the risk of a heart attack.<sup>1, 23</sup>

Adolescents are especially sensitive to the effects of nicotine and are likely to underestimate its addictiveness. Research shows that adolescent smokers report some symptoms of dependence even at low levels of cigarette consumption.<sup>25</sup>



Adolescents are still going through critical periods of brain growth and development and are especially vulnerable to the toxic effects of nicotine. Exposure to nicotine during adolescence can harm brain development and affect future tobacco use and smoking-related harms.<sup>20, 24, 25</sup> Even a brief period of continuous or intermittent nicotine exposure in adolescence elicits lasting neurobehavioral damage.<sup>26</sup>

## Exposure to Secondhand Aerosol

While e-cigarettes pollute the air less than traditional cigarettes, contrary to popular belief, e-cigarettes do not emit a harmless water vapor, but a concoction of chemicals toxic to human cells in the form of an aerosol. Vapors are purely gases, whereas aerosols also contain particulate matter.<sup>5</sup>



Although several studies have found lower levels of carcinogens in e-cigarette aerosol compared to smoke emitted by traditional cigarettes, the mainstream and secondhand e-cigarette aerosol has been found to contain at least ten chemicals that are on California's list of chemicals known to cause cancer, birth defects, or other reproductive harm, including acetaldehyde, benzene, cadmium, formaldehyde, isoprene, lead, nickel, nicotine, N nitrosonornicotine, and toluene.<sup>1-3, 27</sup> There is also evidence that e-cigarette aerosol

contains propylene glycol and higher levels of other toxicants including heavy metals (tin, nickel) and silicate nanoparticles than are present in traditional cigarettes.<sup>3</sup>

Overall, research confirms that e-cigarettes are not emission-free and their pollutants could be of health concern for both users and those exposed to the secondhand aerosol. Although it may not be as dangerous as secondhand smoke from cigarettes, people passively exposed to e-cigarette aerosol absorb nicotine at levels comparable to passive smokers.<sup>28</sup> They are also exposed to volatile organic compounds (VOCs) and fine/ultrafine particles.<sup>27</sup> These ultrafine particles can travel deep into the lungs and lead to tissue inflammation.<sup>23</sup>

## Harm Reduction Claims and Myths about Cessation

Despite numerous claims, the effectiveness of e-cigarettes as cessation aids has not been proven. Unlike the U.S. Food and Drug Administration (FDA)-approved nicotine replacement therapies, e-cigarettes are not FDA-approved cessation aids. There is no scientific evidence that e-cigarettes help smokers successfully quit traditional cigarettes or that they reduce their consumption.<sup>9, 29</sup>

A number of recent studies have shown that e-cigarette users are no more likely to quit than regular smokers, with one study finding that 89 percent of e-cigarette users are still using them one year later.<sup>30</sup> Another study found that e-cigarette users are a third less likely to quit cigarettes, suggesting that e-cigarettes inhibit people from successfully kicking their nicotine addiction.<sup>31, 32</sup>



**89%**  
of e-cigarette  
users are still  
using them  
one year later

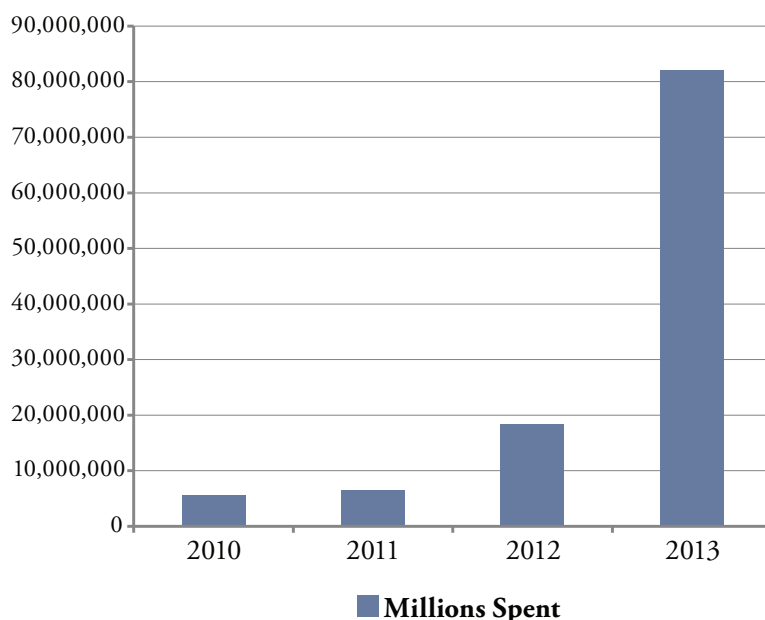
In addition, dual use of cigarettes and e-cigarettes is continuing to rise, which may diminish any potential benefits of cutting back on traditional cigarettes.<sup>33</sup> Continuing to smoke traditional cigarettes, while also using e-cigarettes, does not reduce cardiovascular health risks.<sup>1, 34, 35</sup>

## Unrestricted Marketing

In just three years, the amount of money spent on advertising e-cigarettes increased more than 1,200 percent or 12-fold (Figure 2).<sup>36, 37</sup> E-cigarette ads are found in all forms of media, including TV and radio where cigarette ads were banned more than 40 years ago.

**Figure 2**

### Estimated E-Cigarette Advertising, U.S.



Sources:

2010 and 2013 estimates from: Kantar Media Intelligence e-cigarette competitive spend data as reported in Legacy, 'Vaporized: E-Cigarettes, Advertising, and Youth', (2014).

2011 and 2012 estimates from: A. E. Kim, K. Y. Arnold, and O. Makarenko, 'E-Cigarette Advertising Expenditures in the U.S., 2011-2012', *Am J Prev Med*, 46 (2014), 409-12.

Many TV networks with a substantial proportion of youth viewers, are airing e-cigarette TV advertising. E-cigarette ads have appeared on highly viewed broadcasts, including the 2013 and 2014 Super Bowls, which had more than 110 million viewers.<sup>38, 37</sup>

In addition to TV, e-cigarette ads are on the radio, magazines, newspapers, online, and in retail stores. In Style, Us Weekly, Star, Entertainment Weekly and Rolling Stone are some of the tabloids and magazines with e-cigarette ads reaching millions of youth and young adults.<sup>38, 39</sup> Manufacturers are also promoting their products on social media sites

(Facebook, Instagram, YouTube and Twitter), which are heavily used by youth and young adults, and sponsoring sports, music, and cultural events in California where free samples may also be provided.<sup>37</sup>

Most of the e-cigarette marketing tactics were previously used by tobacco companies to market traditional cigarettes to kids, such as featuring celebrities.<sup>39</sup> Advertising appeals include rebelliousness, sexual appeal, glamour, trendy and fun—all of which strongly resonate with youth who have a desire to be cool and fit in. Cartoon characters, which are also prohibited in traditional cigarette advertising for their youth appeal, are used by some brands and there are numerous youth oriented designs for e-cigarette products, including "Hello Kitty."





Many ads state that e-cigarettes are a way to get around smoking bans, which undermines social norms and entices young people to disregard laws established for traditional cigarettes.

Another tactic used to imply the safety of these products is that the e-liquid containing nicotine is typically labeled as “e-juice” and promoted in candy and fruit flavors, such as cotton candy, gummy bear, chocolate mint, watermelon, and grape. The fact that e-cigarettes contain nicotine is downplayed in e-cigarette advertising. Younger adults and youth who are experimenting with these products may not realize that e-juice contains the highly addictive chemical nicotine, and that the products are classified as a tobacco product.



e-liquid

The leading e-cigarette brands have taken the position that their products should not be sold or marketed to youth, but advertising industry data revealed that 73 percent of 12-17 year olds were exposed to e-cigarette advertising from Blu, the most heavily advertised e-cigarette brand.<sup>38</sup>



**73%**  
of 12-17 year  
olds were  
exposed to  
e-cigarette  
advertising

All of the major tobacco companies now own e-cigarette brands and the amount of e-cigarette advertising is expected to skyrocket. The two biggest tobacco companies, R.J. Reynolds (Camel brand) and Altria (Marlboro brand), launched their own e-cigarette brands nationally in late June and early July 2014. They join Lorillard, the third biggest tobacco company, already in the market with Blu e-cigarettes for the last few years. Other types of e-cigarette-like products can also be expected from the major tobacco companies, such as the recent news by Philip Morris International to test and launch an e-cigarette device that heats tobacco leaf instead of a liquid.<sup>40</sup>

## Where E-Cigarettes are Sold in California

E-cigarettes are readily available throughout California, and the number of stores selling e-cigarettes quadrupled in a two-year period, from 2011 to 2013. A survey of over 7,000 retail stores conducted in 2013 showed that 46 percent of retail stores that sold tobacco also sold e-cigarettes in California.<sup>41</sup> In 2011, only 12 percent of stores sold e-cigarettes.<sup>42</sup>

The map of where e-cigarettes are sold in California shows that counties around the Bay Area, Sacramento and San Diego have a higher percentage of stores selling e-cigarettes than the statewide average of 46 percent and many are equal to the state average (Figure 3).

Tobacco companies have historically enlisted convenience stores, the type of store most frequented by youth, as their most important partners in marketing tobacco products and opposing policies that reduce tobacco use.<sup>43</sup> More than 60 percent of convenience stores sold e-cigarettes in 2013, with almost one third selling e-cigarettes near candy, ice cream, or slushie/soda machines. Drug stores and pharmacies (other than CVS Pharmacy which will no longer sell tobacco as of October 2014), which people visit to improve their health, are also selling e-cigarettes at a rate higher than the state average (56 percent vs. 44 percent), with 88 percent of those stores placing e-cigarettes visibly in the main check-out area.<sup>41</sup>

**Figure 3**





# Local Efforts

While the FDA has proposed a rule that would provide limited regulation of e-cigarettes, the FDA does not have the authority to regulate “where” e-cigarettes may be used. Thus, the responsibility lies with states and local governments to implement restrictions that protect youth, workers, and the public from exposure to e-cigarette aerosol emissions.

Given that much of e-cigarette marketing focuses on the users’ ability to circumvent smoke-free laws and “smoke anywhere,” local communities play a critical role in protecting nonsmokers and youth from the secondhand exposure to the e-cigarette aerosol.

Many California cities and counties are taking steps to treat e-cigarettes the same as cigarettes and other tobacco products. To date, more than one hundred cities and counties in California have passed policies regulating the use of e-cigarettes in their jurisdictions, some requiring retailers to obtain a license to sell e-cigarettes, while others prohibit the use of e-cigarettes in indoor and/or outdoor areas, including in multi-unit housing complexes.<sup>44</sup>







# Summary of FDA Proposed Regulation

In 2011 the U.S. Court of Appeals determined that e-cigarettes may not be regulated by the FDA as a drug or medical device, but may be regulated as a tobacco product under the Family Smoking Prevention and Tobacco Control Act of 2009.<sup>45</sup> As described below, on April 24, 2014, the FDA released its proposed deeming rule to regulate the sale and distribution of e-cigarettes.<sup>46</sup> The proposed rule is limited in scope and may take several years to be finalized and even longer to be implemented. As written now, the proposed rule would:

- Prohibit the sales of e-cigarettes to anyone under the age of 18 nationally
- Restrict vending machines to adult-only facilities
- Prohibit free samples
- Require a nicotine health warning statement on packaging and in advertisements
- Require all manufacturers to register their e-cigarette product with the FDA
- Require ingredients to be disclosed
- Allow the FDA to review any new or changed products before being sold
- Require manufacturers to show scientific evidence to support a claim that an e-cigarette product is less harmful and demonstrate the overall public health benefit



E-cigarette samples provided at an event.



blu cigs shared Neon Desert Music Festival's photo.  
May 23

We'll be at Neon Desert Music Festival all weekend! Stop by our tent to say hi and get free samples! #NeonDesert #NDMF2014

NDMF'ers! Take back your freedom at the blu cigs tent with free samples from the most electric #eCig company in the biz. #bluFreedom #bluNation #NeonDesert #NDMF2014. Restricted to adults +18, ID required upon entry. NOT FOR SALE TO MINORS.



E-cigarette sponsorship of events and samples.



# Public Education Campaign on E-Cigarettes

As the State of California Health Officer, and in the face of public health and safety concerns, aggressive e-cigarette marketing, and increasing number of e-cigarette users, I am announcing the intentions of CDPH to launch an educational campaign to inform the public about the dangers of e-cigarettes. The campaign will include:

- **Partnering with the public health, medical, and child care communities:** CDPH will disseminate information to the public health, medical, and child care communities to increase awareness about the known toxicity of e-cigarettes and the high risk of poisonings, especially to children. We will continue to promote and support the use of proven effective cessation therapies.
- **The launch of a media and public education campaign:** California was the first state in the nation to comprehensively address smoking in 1990, including a bold public education campaign. We must do the same today to address the proliferation of e-cigarette marketing and products.
- **Joining with the California Department of Education (CDE) and school officials:** The Department will work with CDE and school officials to assist in providing accurate information to parents, school administrators, and students on the dangers of e-cigarettes.

IT'S **NOT** JUST  
"HARMLESS WATER VAPOR"

E-cigarette aerosol contains  
at least **10 chemicals** on  
California's Prop 65 list of  
chemicals known to cause  
**cancer, birth defects or other  
reproductive harm.**

TOLUENE  
ACETALDEHYDE  
CADMIUM  
BENZENE  
FORMALDEHYDE  
ISOPRENE  
LEAD  
NICKEL  
NICOTINE  
N-NITROSONORNICOTINE



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# Conclusion

The facts outlined in this report indicate a high need to educate the public regarding safety concerns associated with e-cigarettes. These devices pose a poisoning hazard, particularly for children, but also for adults who may confuse e-liquid bottles with other products. The nicotine in e-cigarettes has lasting health implications to the brain development of teens and young adults, and there are indications that chemicals in e-liquids may pose a respiratory hazard to users and to those exposed to the aerosol emitted from these devices. Furthermore, there are worker safety and biohazard concerns regarding the conditions under which e-liquids are mixed and how materials are disposed. Increasingly, there are reports from schools and law enforcement agencies about the use of these e-cigarettes for other illicit substances.

The adverse health effects of e-cigarettes and their by-products make it clear that these products should be strictly regulated. Restrictions on marketing to youth and access by youth, protections to prevent poisonings—particularly among children—and education of the public on the dangers of e-cigarettes are important measures to take to address this growing public health threat.



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# The Truth About Flavored Tobacco



The use of flavored tobacco products such as cigars, cigarillos, smokeless tobacco, hookah tobacco, and e-liquids (used in e-cigarettes) has increased in recent years.<sup>1</sup> These products use **enticing flavors, colorful packaging and lower prices** to hook a new generation of tobacco users.

## A Public Health Threat

### Enticing Fruit and Candy Flavors



Sweet flavors like watermelon, cherry, chocolate, mint, and gummy bear **appeal to kids and teens.**<sup>2</sup>

Flavorings **mask the harsh taste of tobacco** which make it easier for youth to initiate tobacco use.<sup>2</sup>

### Marketed to Young People

Flavored tobacco products often use the same flavoring chemicals as **popular brands** like Jolly Rancher, Kool-Aid, and Life Savers.<sup>3</sup>

Little cigars are often sold in small packages for **less than a dollar** and promoted as a low-cost alternative to cigarettes.<sup>4,5</sup>

**Colorful packaging and placement near the register** makes them highly visible and attractive to kids.<sup>4</sup>



### Growing Teen Use

A majority of youth report flavoring as a leading reason for using tobacco products.<sup>6</sup> This includes:

82% of e-cigarette users

79% of hookah users

74% of cigar users

69% of smokeless users

**80%** of young people who have ever used tobacco **started with a flavored tobacco product.**<sup>6</sup>



## Consequences for Our Youth

### Long term addiction

The U.S. Surgeon General has warned that flavored tobacco products help new users establish habits that can **lead to long-term addiction**.<sup>7</sup>



Flavors like menthol in tobacco products make it **harder for users to quit**.<sup>8</sup>



Smokers who start at a younger age, are more likely to develop a **severe nicotine addiction**.<sup>7</sup>

### Serious health risks

All nicotine products are addictive and increase the risk of developing **serious health problems**.<sup>9</sup>



Cancer



Heart Disease



Emphysema

The chemical Diacetyl, found in 75% of flavored e-liquids, is linked to bronchiolitis obliterans ("popcorn lung") which causes **irreversible lung damage**.<sup>10,11</sup>



## Protecting Our Communities

The FDA has banned the sale of flavored cigarettes (other than menthol) because they appeal to youth. But flavored e-cigarettes, e-liquid, cigars, hookah, and chewing tobacco continue to be sold.

**Prohibiting the sale of all flavored tobacco products** is a critical step to preventing another generation of young people from living with a lifetime of addiction.



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## Jurisdictions in Los Angeles County with Smoke-Free Multi-Unit Housing Policies

Jurisdiction	Includes Tobacco, Cannabis, and ESDs <sup>1</sup>	Includes Tobacco and Cannabis	Includes Tobacco and ESDs
Baldwin Park	X		
Beverly Hills			X
Burbank <sup>2</sup>		X	
Calabasas	X		
Carson <sup>3</sup>	X		
Compton	X		
Culver City		X	
El Monte	X		
Glendale	X		
Huntington Park	X		
Manhattan Beach	X		
Pasadena		X	
Santa Monica	X		
South Pasadena	X		
Temple City <sup>4</sup>	X		

<sup>1</sup> ESDs – Electronic Smoking Devices

<sup>2</sup> This jurisdiction only prohibits smoking in common areas of multi-unit residences.

<sup>3</sup> This jurisdiction only prohibits smoking in outdoor common areas of multi-unit residences.

<sup>4</sup> This jurisdiction only prohibits smoking in indoor common areas of multi-unit residences.

## Los Angeles County Jurisdictions with Smoke-Free Outdoor Dining Policies

Jurisdiction	Includes Tobacco, Cannabis, and ESDs <sup>1</sup>	Includes Tobacco and Cannabis	Includes Tobacco and ESDs	Includes Tobacco Only
Agoura Hills	X			
Baldwin Park				X
Bell	X			
Beverly Hills			X	
Burbank		X		
Calabasas	X			
Carson	X			
Compton	X			
Culver City		X		
Gardena	X			
Glendale	X			
Hermosa Beach	X			
Huntington Park	X			
La Canada Flintridge	X			
Long Beach	X			
Los Angeles			X	
Malibu				X
Manhattan Beach	X			
Monterey Park			X	
Pasadena		X		
San Fernando	X			
Santa Monica	X			
Sierra Madre		X		
South El Monte	X			
South Pasadena	X			
Temple City	X			
West Hollywood				X

<sup>1</sup> ESDs – Electronic Smoking Device

## Los Angeles County Jurisdictions with Smoke-Free Parks Policies

Jurisdiction	Includes Tobacco, Cannabis, and ESDs <sup>1</sup>	Includes Tobacco and Cannabis	Includes Tobacco and ESDs	Includes Tobacco Only
Agoura Hills	X			
Alhambra			X	
Arcadia			X	
Artesia			X <sup>2</sup>	
Azusa			X	
Baldwin Park				X
Bell	X			
Bell Gardens	X			
Beverly Hills			X	
Burbank		X		
Calabasas	X			
Carson	X			
Cerritos	X			
Claremont				X
Compton	X			
Covina		X		
Culver City		X		
Diamond Bar				X
Downey	X			
Duarte				X
El Monte	X			
Gardena	X			
Glendale	X			
Glendora	X			
Hawaiian Gardens			X	
Hawthorne		X		
Hermosa Beach	X			
Huntington Park	X			
Inglewood		X		
Irwindale				X
La Canada Flintridge	X			
La Habra Heights		X		
La Mirada	X			
La Puente				X
La Verne				X
Lawndale	X			



<b>Jurisdiction</b>	<b>Includes Tobacco, Cannabis, and ESDs<sup>1</sup></b>	<b>Includes Tobacco and Cannabis</b>	<b>Includes Tobacco and ESDs</b>	<b>Includes Tobacco Only</b>
<b>Lomita</b>		X		
<b>Long Beach</b>	X			
<b>Los Angeles</b>			X	
<b>Lynwood</b>				X
<b>Manhattan Beach</b>	X			
<b>Maywood</b>				X
<b>Monrovia</b>	X			
<b>Monterey Park</b>			X	
<b>Norwalk</b>	X			
<b>Palmdale</b>	X			
<b>Pasadena</b>		X		
<b>Palos Verdes Estates</b>	X			
<b>Pico Rivera</b>	X			
<b>Pomona</b>			X	
<b>Rancho Palos Verdes</b>		X		
<b>Redondo Beach</b>				X
<b>Rosemead</b>				X
<b>San Dimas</b>	X			
<b>San Fernando</b>	X			
<b>San Gabriel</b>				X
<b>Santa Clarita</b>	X			
<b>Santa Fe Springs</b>				X
<b>Santa Monica</b>	X			
<b>Sierra Madre</b>				X
<b>South El Monte</b>	X			
<b>South Gate</b>				X
<b>South Pasadena</b>	X			
<b>Temple City</b>	X			
<b>Torrance</b>	X			
<b>Walnut</b>				X
<b>West Covina</b>	X			
<b>Whittier</b>				X

<sup>1</sup> ESDs – Electronic Smoking Device

<sup>2</sup> Policy includes ESDs but not tobacco

# Surgeon General's Advisory on E-cigarette Use Among Youth

*I, Surgeon General of the United States Public Health Service, VADM Jerome Adams, am emphasizing the importance of protecting our children from a lifetime of nicotine addiction and associated health risks by immediately addressing the epidemic of youth e-cigarette use. The recent surge in e-cigarette use among youth, which has been fueled by new types of e-cigarettes that have recently entered the market, is a cause for great concern. **We must take action now to protect the health of our nation's young people.***

**KNOW THE RISKS. TAKE ACTION. PROTECT OUR KIDS.**

## The E-cigarette Epidemic Among Youth

Considerable progress has been made in reducing cigarette smoking among our nation's youth.<sup>1</sup> However, the tobacco product landscape continues to evolve to include a variety of tobacco products, including smoked, smokeless, and electronic products, such as e-cigarettes.<sup>2</sup> E-cigarettes are designed to deliver nicotine, flavorings, and other additives to the user via an inhaled aerosol.<sup>2</sup>

E-cigarettes entered the U.S. marketplace around 2007, and since 2014, they have been the most commonly used tobacco product among U.S. youth.<sup>2</sup> E-cigarette use among U.S. middle and high school students increased 900% during 2011-2015, before declining for the first time during 2015-2017.<sup>3</sup> However, current e-cigarette use increased 78% among high school students during the past year, from 11.7% in 2017 to 20.8% in 2018.<sup>4</sup> In 2018, more than 3.6 million U.S. youth, including 1 in 5 high school students and 1 in 20 middle school students, currently use e-cigarettes.<sup>4</sup>

E-cigarette aerosol is not harmless.<sup>2</sup> Most e-cigarettes contain nicotine – the addictive drug in regular cigarettes, cigars, and other tobacco products.<sup>2</sup> Nicotine exposure during adolescence can harm the developing brain – which continues to develop until about age 25.<sup>2</sup> Nicotine exposure during adolescence can impact learning, memory, and attention.<sup>1,2</sup> Using nicotine in adolescence can also increase risk for future addiction to other drugs.<sup>1,2</sup> In addition to nicotine, the aerosol that users inhale and exhale from e-cigarettes can potentially expose both themselves and bystanders to other harmful substances, including heavy metals, volatile organic compounds, and ultrafine particles that can be inhaled deeply into the lungs.<sup>2</sup>

Many e-cigarettes also come in kid-friendly flavors. In addition to making e-cigarettes more appealing to young people,<sup>5</sup> some of the chemicals used to make certain flavors may also have health risks.<sup>2</sup> E-cigarettes can also be used to deliver other drugs, including marijuana.<sup>2</sup> In 2016, one-third of U.S. middle and high school students who ever used e-cigarettes had used marijuana in e-cigarettes.<sup>6</sup>

For adults, e-cigarettes may have the potential to reduce risk for current smokers if they completely transition from cigarettes to e-cigarettes; however, a majority of adults who use e-cigarettes also smoke cigarettes.<sup>7</sup> For youth, the use of multiple tobacco products puts youth at even greater risk for addiction and tobacco-related harms.<sup>1,2</sup> Moreover, a 2018 National Academy of Sciences, Engineering, and Medicine report concluded that there was moderate evidence that e-cigarette use increases the frequency and intensity of cigarette smoking in the future.<sup>7</sup> But any e-cigarette use among young people is unsafe, even if they do not progress to future cigarette smoking.<sup>2</sup>

## E-cigarettes Come in Many Shapes and Sizes

E-cigarettes are a rapidly changing product class, and are known by many different names, including “e-cigs,” “e-hookahs,” “mods,” and “vape pens.”<sup>2</sup> Recently, a new type of e-cigarette has become increasingly popular among our nation's youth due to its minimal exhaled aerosol, reduced odor, and small size, making it easy to conceal.<sup>8</sup> Many of these new e-cigarettes look like a USB flash drive, among other shapes. One of the most commonly sold

USB flash drive shaped e-cigarettes is JUUL, which experienced a 600% surge in sales during 2016-2017, giving it the greatest market share of any e-cigarette in the U.S. by the end of 2017.<sup>9</sup> Other companies are now also starting to sell e-cigarettes that look like USB flash drives.

All JUUL e-cigarettes have a high level of nicotine. A typical JUUL cartridge, or “pod,” contains about as much nicotine as a pack of 20 regular cigarettes.<sup>10</sup> These products also use nicotine salts, which allow particularly high levels of nicotine to be inhaled more easily and with less irritation than the free-base nicotine that has traditionally been used in tobacco products, including e-cigarettes. This is of particular concern for young people, because it could make it easier for them to initiate the use of nicotine through these products and also could make it easier to progress to regular e-cigarette use and nicotine dependence. However, despite these risks, approximately two-thirds of JUUL users aged 15-24 do not know that JUUL always contains nicotine.<sup>11</sup>

## You Can Take Action

We must take aggressive steps to protect our children from these highly potent products that risk exposing a new generation of young people to nicotine.<sup>2,7</sup> The bad news is that e-cigarette use has become an epidemic among our nation’s young people. However, the good news is that we know what works to effectively protect our kids from all forms of tobacco product use, including e-cigarettes.<sup>1,2,12</sup> We must now apply these strategies to e-cigarettes, including USB flash drive shaped products such as JUUL. To achieve success, we must work together, aligning and coordinating efforts across both old and new partners at the national, state, and local levels. Everyone can play an important role in protecting our nation’s young people from the risks of e-cigarettes.

## Information for Parents

- **You have an important role to play in addressing this public health epidemic.**
- Learn about the different shapes and types of e-cigarettes and the risks of all forms of e-cigarette use for young people at <https://e-cigarettes.surgeongeneral.gov/>.
- Set a good example by being tobacco-free. If you use tobacco products, it’s never too late to quit. Talk to a healthcare professional about quitting all forms of tobacco product use. For free help, visit [smokefree.gov](https://smokefree.gov) or call 1-800-QUIT-NOW.
- Adopt tobacco-free rules, including e-cigarettes, in your home and vehicle.
- Talk to your child or teen about why e-cigarettes are harmful for them. It’s never too late.
- Get the Surgeon General’s tip sheet for parents, [Talk With Your Teen About E-cigarettes](https://e-cigarettes.surgeongeneral.gov/), at <https://e-cigarettes.surgeongeneral.gov/>. Start the conversation early with children about why e-cigarettes, including JUUL, are harmful for them.
- Let your child know that you want them to stay away from all tobacco products, including e-cigarettes, because they are not safe for them. Seek help and get involved.
  - Set up an appointment with your child’s health care provider so that they can hear from a medical professional about the health risks of tobacco products, including e-cigarettes.
  - Speak with your child’s teacher and school administrator about enforcement of tobacco-free school policies and tobacco prevention curriculum.
  - Encourage your child to learn the facts and get tips for quitting tobacco products at [Teen.smokefree.gov](https://Teen.smokefree.gov).

## Information for Teachers

- **You have an important role to play in addressing this public health epidemic.**
- Learn about the different shapes and types of e-cigarettes and the risks of all forms of e-cigarette use, including JUUL, for young people at <https://e-cigarettes.surgeongeneral.gov/>.
- Develop, implement, and enforce tobacco-free school policies and prevention programs that are free from tobacco industry influence, and that address all types of tobacco products, including e-cigarettes.

- Engage your students in discussions about the dangers of e-cigarette use. To help you, the Food and Drug Administration (FDA), and Scholastic, developed free resources for teachers. These materials can be found at [www.scholastic.com/youthvapingrisks](http://www.scholastic.com/youthvapingrisks).

## Information for Health Professionals

- **You have an important role to play in addressing this public health epidemic.**
- Learn about the different shapes and types of e-cigarettes and the risks of all forms of e-cigarette use, including JUUL, for young people at <https://e-cigarettes.surgeongeneral.gov/>.
- Ask about e-cigarettes, including small, discreet devices such as JUUL, when screening patients for the use of any tobacco products.
- Educate patients about the risks of all forms of tobacco product use, including e-cigarettes, for young people.
- Encourage patients to quit. For free help, patients can visit [smokefree.gov](http://smokefree.gov) or call 1-800-QUIT-NOW.

## Information for States, Communities, Tribes, and Territories

- **You have an important role to play in addressing this public health epidemic.**
- Implement evidence-based population-level strategies to reduce e-cigarette use among young people, such as including e-cigarettes in smoke-free indoor air policies, restricting young peoples' access to e-cigarettes in retail settings, licensing retailers, implementing price policies, and developing educational initiatives targeting young people.
- Implement strategies to curb e-cigarette advertising and marketing that are appealing to young people.
- Implement strategies to reduce access to flavored tobacco products by young people.

KNOW THE RISKS. TAKE ACTION. PROTECT OUR KIDS.

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# The Truth About Menthol Cigarettes



Menthol is a flavoring that can be derived naturally from mint plants or synthetically produced.<sup>1</sup> This cool, minty and fresh flavor is often used in products like lip balm, cough medicine, mouth wash, and candy.<sup>2</sup> Menthol is also used in cigarettes and **makes smoking more appealing to young and beginning smokers.**<sup>1</sup>

## A Public Health Threat

### Easier to Inhale

The menthol flavor in cigarettes **masks the harsh taste of tobacco** and makes the smoke feel smoother and easier to inhale.<sup>1</sup>



This **makes it easier for new smokers to start.**<sup>1</sup>

Menthol also allows smokers to inhale more deeply, which causes harmful particles to settle **deeper inside the lungs.**<sup>2</sup>

### Harder to Quit

Scientific studies show that the sensory effects and flavor of menthol can **make cigarettes more addictive.**<sup>3</sup>

Menthol smokers show greater signs of nicotine dependence and are **less likely to successfully quit smoking** than other smokers.<sup>4,5</sup>



## Increasing Menthol Use

Although cigarette use is declining in the U.S., use of menthol cigarettes has increased in recent years, especially among young people and new smokers.<sup>6</sup>

Approximately **19 million** Americans smoke menthol cigarettes, including over 1 million adolescents.<sup>6</sup>

While only 25% of all cigarettes sold in the U.S. are labeled as menthol, **90%** of all tobacco cigarettes actually contain some menthol.<sup>7,8</sup>



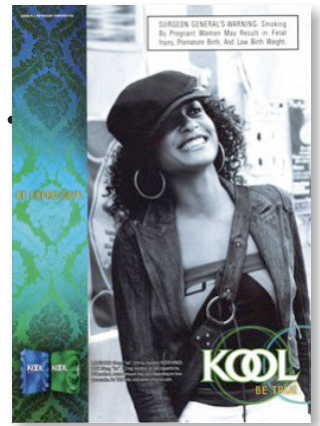


## Disproportionate Marketing and Use

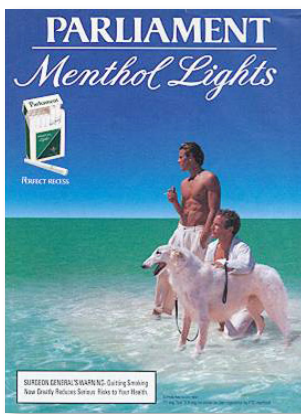
### African American Communities

Tobacco industry documents reveal **aggressive menthol tobacco product marketing** and higher rates of discounts and promotions on menthol cigarette brands in African American neighborhoods.<sup>9</sup>

In California, **70%** of African American adult cigarette smokers smoke menthol cigarettes, compared to only 18% of white adult cigarette smokers.<sup>10</sup>



### LGB Communities



The tobacco industry has also targeted the lesbian, gay and bisexual (LGB) community.

**Nearly 50%** of all LGB adult cigarette smokers in California smoke menthol cigarettes, compared to only 28% of straight adult cigarette smokers.<sup>10</sup>



### Youth

**57%** of smokers in the U.S. age 12–17 smoke menthol cigarettes.<sup>11</sup>

## Protecting our Communities

A National study found that **44.5%** of African Americans and **44%** of women would quit smoking if menthol cigarettes were banned.<sup>12</sup>

**Prohibiting the sale of menthol cigarettes** is a critical step to preventing a new generation of Californians from becoming addicted to tobacco.



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The tobacco industry has a long history of using flavored tobacco to target youth and communities of color. The majority of youth who start experimenting with tobacco begin with flavored tobacco.<sup>1</sup> These products come in a variety of candy-like flavors including bubble gum, grape, menthol and cotton candy and include e-cigarettes, hookah tobacco, cigars, smokeless tobacco, and even flavored accessories such as blunt wraps.

Since 2009, the United States Food and Drug Administration (FDA) has banned flavored cigarettes nationwide. However, this ban included an exemption for menthol flavored cigarettes and doesn't extend to non-cigarette tobacco products. There are currently no state laws in California restricting the sale of flavored tobacco products. It is up to local communities to take action to protect their youth from the lure of enticing flavored tobacco.

The first community to restrict the sale of flavored tobacco in California was Santa Clara County in 2010. Since then, thirty-five communities have passed similar policies.

### What products may be included?

- 1. E-Cigarettes** – Restricts the sale of flavored electronic cigarettes.
- 2. Menthol** – Restricts the sale of tobacco products labelled as menthol, including cigarettes, smokeless tobacco, little cigars, etc.
- 3. Little Cigars** – Restricts the sale of flavored little cigars, which are small, usually filtered cigars wrapped in brown paper containing tobacco leaf. Little cigars became a popular alternative following the FDA's ban on flavored cigarettes.
- 4. Smokeless Tobacco** – Restricts the sale of flavored smokeless tobacco such as chewing tobacco, dip, snus and snuff.

**5. Components & Accessories** – Restricts the sale of flavored accessory products such as blunt wraps and e-juice additives. These products cannot be smoked alone and serve as a delivery system for smoked products.

**6. Products Marketed as Flavored** – Tobacco companies sometimes try to circumvent flavor restrictions by marketing products as flavored without directly labelling them as such. This policy option allows communities to broaden the definition of flavored tobacco to include these products.

### What exemptions are allowed?

- 1. Adult-Only Stores Exempted** – Adult-only retailers are limited to customers who are 21 and over. This limits sales of flavored tobacco to stores that youth do not have access to.
- 2. Grandfathered Retailers Exempted** – Allows retailers that were in operation prior to a specified date to continue selling flavored tobacco products.
- 3. Limited to Youth-Populated Areas** – Retailers are required to be a certain distance away from schools, parks, or other youth-oriented locations. Since many flavored tobacco products target youth, including buffer zones is a way to limit their access to flavored products.

## Resources

The Center has additional resources on tobacco retailer licensing ordinances, plug-in policies, and ordinances restricting menthol tobacco available at: <http://center4tobaccopolicy.org/tobacco-policy/tobacco-retail-environment/>. ChangeLab Solutions has model ordinance language available for ordinances restricting flavored tobacco at: <http://changelabsolutions.org>.

City/County Date Passed	Products Included						Exemptions		
	E-Cigs	Menthol	Little Cigars	Smokeless	Components & Accessories	Products marketed as flavored	Adult-Only Stores Exempted	Grandfathered Retailers Exempted?	Limited to Youth-Populated Areas?
San Carlos April 2019	X	X	X	X	X	X			
Larkspur April 2019	X	X	X	X	X	X			
Sacramento April 2019	X	X	X	X	X	X			
Albany April 2019	X	X	X	X	X	X			
Corte Madera March 2019	X	X	X	X	X	X			
Hermosa Beach Jan 2019	X	X	X	X	X	X	X		
San Pablo Dec 2018	X	X	X	X	X	X			
Alameda Nov 2018	X	X	X	X	X	X			
Santa Cruz Nov 2018	X	X	X	X	X	X			
Marin County Nov 2018	X	X	X	X	X	X			
Saratoga Oct 2018	X		X	X	X	X			
Half Moon Bay Oct 2018	X	X	X	X	X	X			
Portola Valley Sep 2018	X	X	X	X	X	X			
Beverly Hills August 2018	X	X	X	X	X	X			
Richmond July 2018	X	X	X	X	X	X			
Sausalito July 2018	X	X	X	X	X				
San Mateo County June 2018	X	X	X	X	X	X			
San Francisco June 2018	X	X	X	X	X	X			
Mono County July 2018		X	X	X	X	X			
Windsor March 2018	X		X**	X	X	X			

City/County Date Passed	Products Included						Exemptions		
	E-Cigs	Menthol	Little Cigars	Smokeless	Components & Accessories	Products marketed as flavored	Adult-Only Stores Exempted	Grandfathered Retailers Exempted?	Limited to Youth-Populated Areas?
Cloverdale Dec 2017	X		X	X		X			
Fairfax Dec 2017	X		X**	X**		X			
San Leandro Oct 2017	X		X	X	X	X			
Palo Alto Oct 2017	X	X	X	X	X	X	X		
Oakland Sep 2017	X	X	X	X	X	X	X		
Contra Costa County July 2017	X	X	X	X	X	X			X 1000 ft
Los Gatos May 2017	X	X	X	X	X	X	X		
Novato Jan 2017	X		X**	X	X	X			
Santa Clara County Oct 2016	X	X	X	X	X	X			
Yolo County Oct 2016	X	X	X	X	X				
Manhattan Beach Dec 2015	X		X	X	X	X	X		
El Cerrito Oct 2015	X	X*	X	X	X	X			
Berkeley Sep 2015	X	X	X	X	X	X			X 600 ft
Sonoma June 2015	X		X**	X***	X				
Hayward July 2014	X	X*	X	X	X	X		X	X 500 ft

<sup>1</sup> Ambrose, B.K., et al., Flavored Tobacco Product Use Among US Youth Aged 12-17 Years, 2013-2014. JAMA, 2015; p.1-3.

\*Does not include menthol cigarettes

\*\*Exempts packages of at least 5 or more

\*\*\*Doesn't apply to pipe tobacco