

Public Health Response to the Vaping Epidemic

Tony Kuo, MD, MSHS

Director

Division of Chronic Disease and Injury Prevention

Los Angeles County Department of Public Health

Los Angeles County Health Agency



E-cigarette Use (Vaping) Epidemic

Electronic cigarettes and other vape devices are devices that deliver an aerosol to the user through inhalation by heating a liquid that usually contains nicotine, flavorings, and other substances (e.g., marijuana).



4.9 million

middle and high school students in 2018 were current users of tobacco products, up from 3.6 million in 2017.¹

Among LA County High School Students³...

1 in 10

are current e-cigarette users

56%

Rate of increase among e-cigarette users between 2015-16 to 2017-18.

15%

Rate of current marijuana use—higher than any tobacco products.

Over
15,000
e-juice flavors
are on the market.²

VAPING-ASSOCIATED PULMONARY INJURIES (VAPI) ARE LINKED TO E-CIGARETTE USE

Symptoms¹

Patients with VAPI injuries have experienced the following symptoms:

Respiratory

- Cough
- Hemoptysis
(coughing up blood)
- Shortness of breath
- Chest pain

Gastrointestinal

- Nausea
- Vomiting
- Diarrhea
- Abdominal pain

Constitutional

- Fatigue or malaise
- Fever
- Weight loss
- Chills

Compounds/Additives Found in VAPI Cases

Includes, but not limited to:

- Nicotine
- Tetrahydrocannabinol (THC)
- Cannabinoids (CBD)
- Synthetic cannabinoids
- Flavorings and other substances

Ongoing Epidemiologic Investigations

The etiology of VAPI is **undetermined** and current epidemiologic investigations involves:

- Identification of harmful aspects of e-cigarette use
- Understanding the underlining mechanisms and causes

Complications during Hospitalization

Approximately

50%

of Los Angeles County patients who were hospitalized for VAPI required **mechanical ventilation**.



Nearly

2 in 3 

cases reported in Los Angeles County are **ages 25 and younger**.²

By the numbers

Number of deaths associated with VAPI

Deaths Nationally

34

Deaths in Los Angeles County

21

Number of cases associated with VAPI

Cases Nationally

1604

Cases in Los Angeles County

27



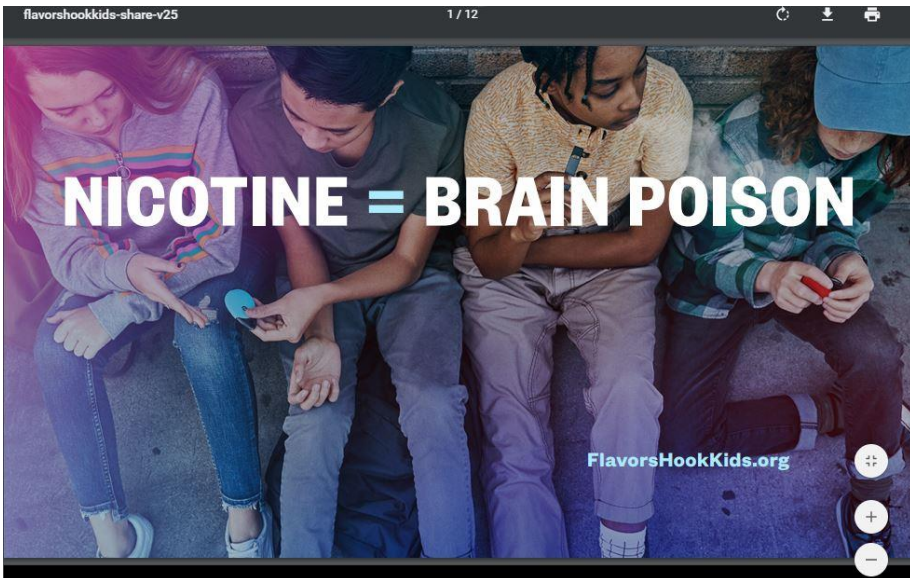
Public Health Response

Local Response to the Epidemic:

- **Education and Engagement** in schools (school toolkit), with parents, in disproportionately affected communities
- **Ordinance, Policy and Procedures** in school districts, County, municipalities
- **Global Risk Communications/Media** to raise public awareness, educate, encourage behavior change
- **Healthcare Providers** to champion and guide this public health crisis, improve identification and early treatment of nicotine addiction, especially in youth

CHANGES TO COUNTY TOBACCO RETAIL ORDINANCES

- ▶ Require a Tobacco Retail License to sell electronic smoking devices (e.g., electronic cigarettes, vapes and other nicotine containing devices)
- ▶ Prohibit the sale, not use, of flavored tobacco products (e.g., watermelon, cherry, mint, gummy bears) and those that include menthol



Rx for Prevention

Addressing the Dangers of Increased E-Cigarette Use Among Youth: A Call to Action for Clinicians

September 2019

Tony Kuo, MD, MSHS, FAAFP
Alice Kuo, MD, PhD, MBA, FAAP, FACP
and the Los Angeles County Medical Societies



Many in the medical and public health communities are increasingly concerned with the use of electronic cigarette products (e-cigarettes) among youth. These electronic products, which are handheld devices designed to "deliver emissions for inhalation by heating a solution that commonly contains nicotine, a humectant, and flavoring chemicals"¹ (i.e., designed for the act of vaping) are becoming all too common in youth sensitive areas such as schools, parks, and libraries. The devices are also often used to deliver other dangerous chemicals such as cannabis/tetrahydrocannabinol (THC). Although research is underway to further study the use of e-cigarettes as a cessation aid for helping adult smokers quit using conventional cigarettes,^{2,3} the highly addictive nature of nicotine combined with the heavy promotion of these products to youth through subversive marketing and use of flavorings has caused a public health crisis in younger populations.⁴⁻¹⁴



MONDAY RX | Clear Lungs, Clear Minds

Jun 24, 2019 0



Thank You!

