YOUTH VAPING EPIDEMIC UPDATE
GOALS

By the end of the webinar, participants will be able to:

• Identify vaping devices and their ingredients,

• Communicate the risks of vaping with students and parents, and

• Access curricula and resources to share with their school communities.
For audio, dial (415) 655-0003
Access code 669 237 587

The webinar is being recorded

Supporting materials will be shared
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The California School-Based Health Alliance is the statewide non-profit organization dedicated to improving the health & academic success of children & youth by advancing health services in schools.

Learn more: schoolhealthcenters.org
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California School-Based Health Conference
May 14-15, 2020 | Sacramento
not so safe
THE FACTS ABOUT VAPING & E-CIGARETTES
Topics

Is That A Vape?
What Are The Risks?
What Is EVALI?
Little Pods, Big Business
Helpful Resources
what is **vaping**?
E-LIQUID + HEATING ELEMENT → AEROSOL
is that a **vape**?
Types of Devices

Cig-a-like

Vape Pen

Tank/Mod
Nicotine Salt Vaping
Pods, Refillables and Disposables

JUUL  Suorin Drop  Puff Bar

Cannabis Vaping
Pods and Cartridges

STIIIZY  “Cart”
E-Liquid Ingredients

Nicotine

Artificial Flavors

Propylene Glycol (PG) and/or Vegetable Glycerin (VG)
Cannabis Vaping: THC Levels Comparison

Average, 1995: 4%

Average, 2014: 12%

STIIIZY Skywalker OG: 82%
what are the risks?
NICOTINE = BRAIN POISON
A meta-analysis of 9 studies found that youth who reported e-cigarette use were 3-4 times as likely to report smoking cigarettes at follow-up.

Nicotine can rewire the teen brain, affecting learning, memory and attention and leading to addiction, especially when used to relieve stress.

How much nicotine does one JUUL pod contain?
One JUUL pod contains more nicotine than an entire pack of cigarettes.
VOLATILE ORGANIC COMPOUNDS

CANCER-CAUSING CHEMICALS

ULTRAFINE PARTICLES

HEAVY METALS SUCH AS NICKEL, TIN, AND LEAD

NICOTINE

FLAVORING SUCH AS DIACETYL, A CHEMICAL LINKED TO A SERIOUS LUNG DISEASE
Although PG, VG and artificial flavorings are safe to eat, **heating them** can form toxic chemicals.

The **heating coil** can also leach metals into the e-liquid.

Barrington-Trimis, 2014; Rubinstein, 2014; Leigh, 2016; Behar, 2016; Kosmider, 2014; Talih, 2015; Salamanca, 2018; Olmedo, 2018.
How many e-liquid flavors did researchers find available in a 2017 study?
15,586

Hsu, 2018.
Passive (Secondhand) Vaping

Studies have found nicotine, formaldehyde, aluminum and other particles in sidestream aerosol.

Children, pregnant women and people with health conditions should avoid exposure.

But it’s just water vapor!
Helpful Hints

1. Nicotine and the brain
2. Chemicals and metals
3. Safer isn’t safe
what is EVALI?
E-cigarette or Vaping-Associated Lung Injury
Symptoms

- Cough, shortness of breath, or chest pain
- Nausea, vomiting, or diarrhea
- Fatigue, fever, or abdominal pain
2,506 Cases
54 Deaths
Poisonous Pot Found in Some Los Angeles-Area Stores
State regulations fail to stop sales of marijuana that could make buyers sick

Maryland cannabis regulators warn of lead contamination risk as they expand tests for heavy metals

By DOUG DONOVAN
THE BALTIMORE SUN | JUN 14, 2019

Real or Counterfeit? How to Avoid Cannabis Product Impostors in LA

The LAPD says there are more than 500 illegal cannabis shops in Los Angeles, many selling dangerous products
Lung Damage From Vaping Resembles Chemical Burns, Report Says

Doctors at the Mayo Clinic examined samples of lung tissue from 17 patients, all of which looked as if the people had been exposed to toxic chemicals, the researchers said.

Four examples of severe vaping-related injury. In two of these cases, the patients died. Larsen et al., New England Journal of Medicine
The [FDA] believes it is prudent to stop using vaping products that contain THC or that have had any substances added to them, including those purchased from retail establishments.
Vaping Illnesses Are Linked to Vitamin E Acetate, C.D.C. Says

Samples of lung fluid from patients with the mysterious illness led to a breakthrough in finding a possible cause. More than 2,000 people have been sickened, many from illicit marijuana-based products.
CDC Recommendations For Current Users

- Avoid street products
- Do not modify devices or liquids
- Do not resume smoking
- Use cessation supports
- Seek medical attention if symptoms arise
But it’s legal and medicine, and ___ kills way more people!
Helpful Hints

1. THC harms the teen brain
2. Medicine has side effects
3. It’s happening quickly
4. Long-term effects unknown
5. We can walk and chew gum
little pods, big business
Altria, maker of Marlboro cigarettes, invests $12.8 billion in Juul
Juul came to a 9th grade classroom and told teens their products were "totally safe," according to teens' testimony.
JUUL Ads: Then and Now

Carolyn, 54
Smoker for 30 years
Try our best vape for just 99¢

For a limited time, get our best price on an Alto Power Unit. Alto Pods sold separately.

SHOP 99¢ POWER UNIT
FDA finalizes enforcement policy on unauthorized flavored cartridge-based e-cigarettes that appeal to children, including fruit and mint

Companies that do not cease manufacture, distribution and sale of unauthorized flavored cartridge-based e-cigarettes (other than tobacco or menthol) within 30 days risk FDA enforcement actions
helpful resources
Proper handling and disposal of E-cigarettes and other vaping devices

**Step 1**
Always wear new nitrile gloves when handling e-cigarettes and vaping devices.

**Step 2**
Place all confiscated parts into a sealed container or bag for storage. This includes:
- Devices and batteries
- E-liquids and bottles
- Tanks, cartridges, and pods

**Step 3**
Transport to a hazardous waste disposal site. To find the nearest location, visit: [https://www.calrecycle.ca.gov/HomeHazWaste/Directory/](https://www.calrecycle.ca.gov/HomeHazWaste/Directory/)

**Don't**
- Handle e-cigarettes with bare hands
- Rinse or throw e-liquids in the sink or toilet
- Throw any component in the trash or recycling bin
Public Health Consequences of E-Cigarettes

E-Cigarette Use Among Youth and Young Adults
A Report of the Surgeon General

The Health Effects of Cannabis and Cannabinoids
The Current State of Evidence and Recommendations for Research
Public Health EVALI Resources

CDPH - EVALI Landing Page

CDC - EVALI Landing Page

FDA - EVALI Landing Page
Curricula and Lesson Plans

Stanford Tobacco Prevention Toolkit

CATCH My Breath

Scholastic Heads Up
Intervention and Cessation

ALA: INDEPTH and Not On Tobacco

California Smokers Helpline

This Is Quitting: Text DITCHJUUL to 88709
Bilingual Parent Resources

Surgeon General: Know The Risks

Drugfree.org
Bilingual Cannabis Resources

Let’s Talk Cannabis

Marijuana Fact Check
Vox: CBD is everywhere. But is it a scam?

NYT: How Big Tobacco Hooked Children on Sugary Drinks

UCSF: Flavor manufacturers warn companies that breathing heated flavors can be dangerous

NYT: JUUL’s Convenient Smoke Screen

AAP: Policy Statement on E-Cigarettes


Citations


Salamanca, J. C., Meehan-Atrash, J., Vreeke, S., Escobedo, J. O., Peyton, D. H., & Strongin, R. M. (2018). E-cigarettes can emit formaldehyde at high levels under conditions that have been reported to be non-averse to users. Scientific reports, 8(1), 7559. doi:10.1038/s41598-018-25907-6. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5954153/


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