

Youth Tobacco and Nicotine Use

Kim Homer Vagadori, MPH
California Youth Advocacy Network

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YOUTH and YOUNG ADULTS

Increase and strengthen youth and young adult engagement in tobacco and cannabis prevention initiatives.

COLLEGES and UNIVERSITIES

Advocate for policy change at colleges and universities to promote smoke and tobacco-free campuses and strengthen substance use prevention and treatment programs.

RESEARCH and EDUCATION

Learn from young people. Utilize findings to educate on factors influencing substance use and strategies for supporting behavior change.



Overview

Prevalence

Past and current tobacco use behavior

Contributing Factors

Overview of emerging products and factors associated with increased youth use

Nicotine and Vaping Concerns

Impact of nicotine and vaping on physical and mental health

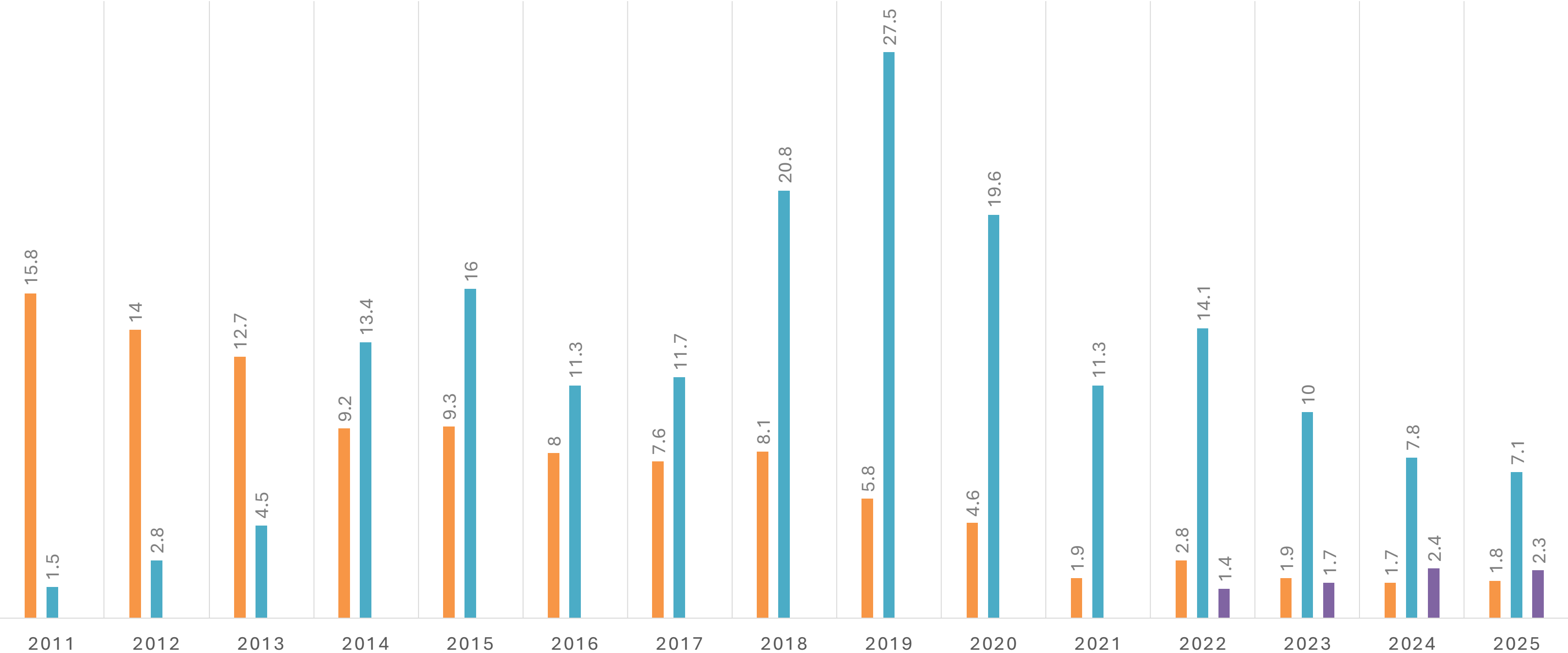
Supporting Behavior Change

Free resources to support young people in living tobacco and nicotine-free

NYTS: Current Cigarette, E-Cigarette, Nicotine Pouch Use Among High School Students

Past 30-Day Use

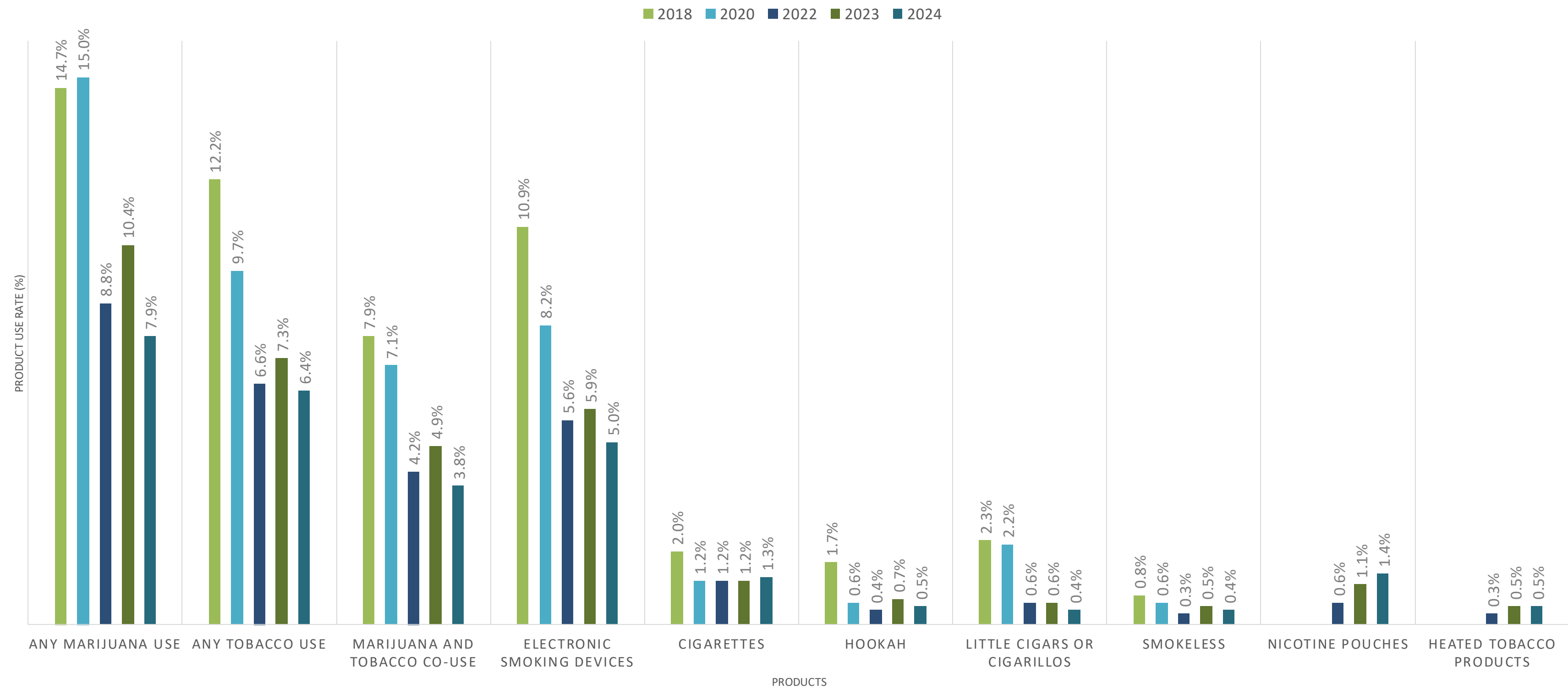
Cigarettes E-Cigarettes Nicotine Pouches



Sources: Centers for Disease Control. (2024). Tobacco Product Use and Associated Factors Among Middle and High School Students – NYTS; Bover Manderski MT, Tomaino M, Torres Alvarez R, Meza R, Delnevo CD. Tobacco Product Use among Middle and High School Students — National Youth Tobacco Survey, United States, 2025. CRST-CASoR Data Brief, 26 March 2026.

CSTS/CYTS: Current Tobacco and Marijuana Use Among High School Students

Past 30-Day Use



Source: Zhu S-H et al. (2021). Results of the Statewide 2019-20 California Student Tobacco Survey. San Diego, California: Center for Research and Intervention in Tobacco Control, University of California San Diego; Dutra, LM, et al. (2023). Annual results report for the California Youth Tobacco Survey 2022. RTI International; Dutra, LM, et al. (2024). Annual results report for the California Youth Tobacco Survey 2023. RTI International; Dutra, LM, et al. (2025). Annual results report for the California Youth Tobacco Survey 2024. RTI International.

Summary of Findings: California Youth Prevalence (2024)

Tobacco Use

19.8% reported ever use

6.4% of high school youth report current (past 30-day) use

10% reported ever use of e-cigarettes

5% of high school youth report current use

39.8% of youth who vape reported frequent use (20+ days)

5.5% reported ever use of cigarettes

1.3% of high school youth report current use

25.3% of youth who use cigarettes reported frequent use (20+ days)

Current use was less than 1% of for all other tobacco products

Exception of nicotine pouches at 1.4%



Contributing Factors



Reasons Young Use Tobacco

To relax or relieve stress and anxiety (33.1%)

Nicotine Buzz (24.8%)

Fun with friends (8.7%)

It looks cool (5.4%)

To control weight (5.3)*

To focus or concentrate (5.0)*

Source: Dutra, LM, et al. (2024). Annual results report for the California Youth Tobacco Survey 2024. RTI International.



First Use vs Current Use (2023)

First Use	Current Use
Males	
Peer Pressure	Get High/Nicotine Buzz
Curiosity	Peer Pressure
Get High/Nicotine Buzz, Family Use	Anxiety
Females	
Peer Pressure	Anxiety
Curiosity	Peer Pressure
Anxiety	Get High/Nicotine Buzz

Source: Guan, T, et al. (2026). Why our youth vape? A trend analysis based on cross-sectional annual surveys of middle and high school students in the US. Medicina, 62,223.



Other Risk Factors for Tobacco Use

Parental Attitude: Students who reported parents feel tobacco use is a little wrong or not wrong have 4.9x higher odds of smoking and 4.6x higher odds of vaping

Use in home

Depressive symptoms linked to higher adjusted odds of tobacco use

Source: Tilton, G, Huston, S, Albert, P. (2023). Risk and protective factors for vaping and smoking among high school students in Main. Prev Chronic Dis, 20:220307. Altwicker-Hamori, S, et al. (2024). Risk factors for smoking in adolescence: evidence from a cross-sectional survey in Switzerland. BMC Public Health, 24:1165.

Evolving Products

Tobacco, nicotine, and marijuana products are constantly changing

Newer products and devices are more discrete (unique designs, may be smaller, and less aerosol)

Higher in nicotine content = increased addiction

Newer devices have higher puff counts (up to 50,000 puffs) = longer use and easier to share

Assumed less harm resulting in students more likely to experiment with these products = young people who vape have increased risk of using other tobacco products



Products and Brands

Top Disposable Brands 2023-2024

School Year: Over 175 distinct brands: Hyde (24.9% of disposables), Lost Mary (12.3%), Geek Bar (10.1%), ElfBar (8.6%), RAZ (3.0%).

Top Disposable Brands 2024-2025

School Year: Over 80 distinct brands: Geek Bar (47.6% of disposables), Lost Mary (9.3%), RAZ (7.0%), ElfBar (3.5%), Ignite (2.4%).

Number of Nicotine & Tobacco Products in Photos (N=4,961)

Other nicotine products	4
Cigars	7
Smokeless tobacco	11
Cigarettes	14
Nicotine pouches	24
E-cigarette tanks/e-liquids	52
E-cigarette pods/devices	457
Disposable e-cigarettes	4392

Over 98% of products
were electronic
nicotine devices.





JUUL

200 puffs
40 mg nicotine

Geek Bar

25,000 puffs
900 mg nicotine

Almost 23 times the amount of
nicotine as one JUUL pod.





Pepper Mintz

Geek Bar



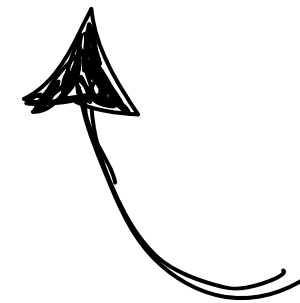
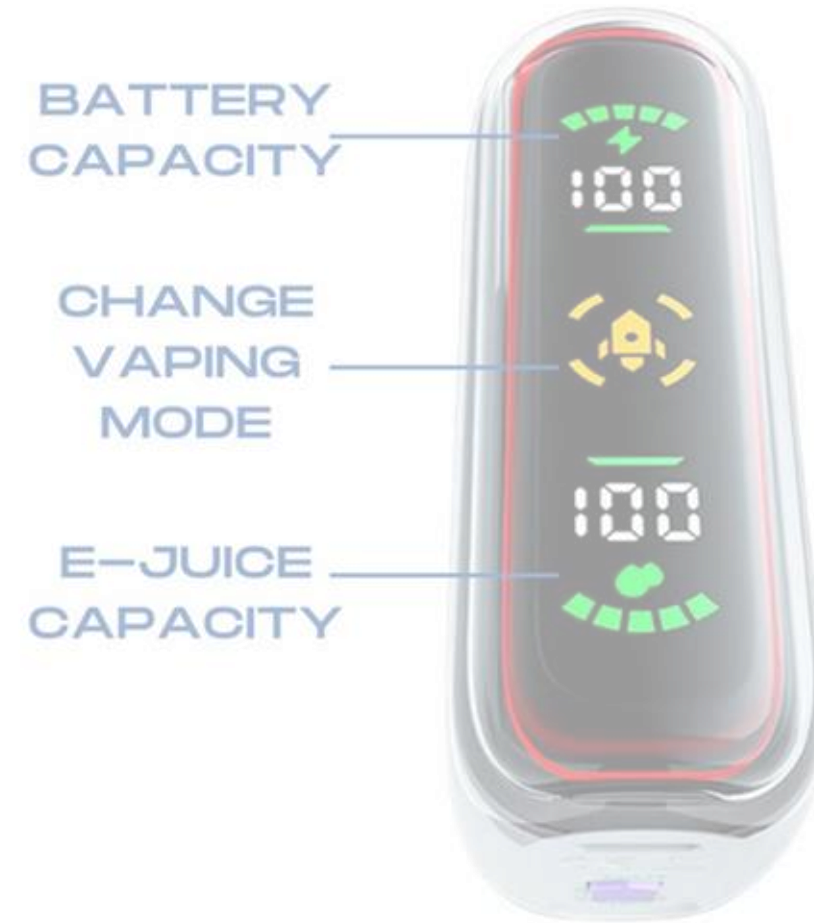
Pepper Mintz



Geek Bar

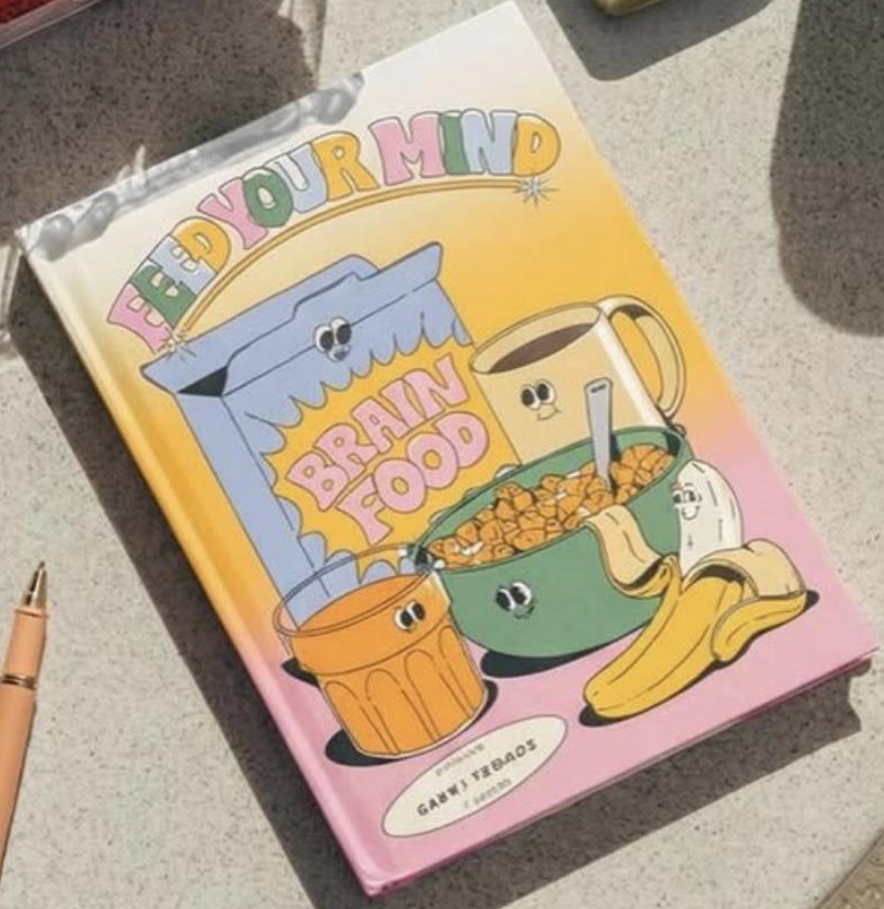


Pepper Mintz



Geek Bar


GEEK BAR



Smart Vapes



The advertisement features three V-Touch Witness vapes against a dark blue background with a glowing blue arc. The top-left vape is teal with a screen showing various icons. The bottom-left vape is yellow with a screen showing a circuit-like pattern. The large central vape is black with a purple side and a screen displaying a colorful, futuristic interface with various data points and icons. The background has a subtle texture resembling a planet's surface.

V-TOUCH
WITNESS VAPEVOLUTION
A Perfect Combination of Tech & High-class vaping.

 30,000 Puffs	 Interactive Touch Screen	 Bluetooth	 3 Vape Modes
 Social Media Integration	 Dedicated Selfie Button	 Built-in Audio Player	 Find my Phone Feature
 Integrated Speaker & Mic	 Games	 Call Functionality	 Workout Tracker





Zyn nicotine pouches gain popularity among youth through social media. Experts explain rising concerns.

Zyn has been embraced by social media influencers
#zynbabwe, #lippillow, #upperdecky, #zynnygang

Between 2021 and 2024, sales of nicotine pouches in the US more than tripled

Sales of Zyn (PMI), On! (Altria), Velo (RJ Reynolds), and Rogue (Swisher) account for 99.8% of total sales

Zyn points that result in discounts and promotions
*empty tins can be redeemed for rewards

Oral nicotine pouches range from 2mg – 50mg, 15-20 pouch cans

Nicotine and Vaping Concerns





Vaping is Just the Start

Young people who have ever used e-cigarettes are more likely to smoke cigarettes compared to youth who do not vape

- Truth Initiative study (2020): Youth who vape have seven times higher odds of smoking cigarettes a year after initial survey

Youth who vape are more likely to transition to marijuana use

- 2018 study: 1 in 4 youth who reported e-cigarette use progressed to smoking marijuana
- Students who tried vaping earlier (12-14 yo) were 2.5x more likely to smoke marijuana at least once a week

Health Effect of Nicotine and Vaping

Exposure to **nicotine** affects key brain receptors, making youth more susceptible to nicotine addiction

- Stimulates pleasure center in the brain. When nicotine levels drop, cravings begin to feel better, creating anxiety and stress (aka withdrawal).

Nicotine increase heart rate and increases risk of heart disease, stroke, irregular heartbeats.

Aerosol from vapes includes heavy metals (battery), chemicals (flavors and additives), and ultrafine particles, nicotine.

- Inflammation and irritation of airways
- Deconstruct air sacs in lungs
- Weaker immune response to infects



15,000 puffs / 5% nicotine / 20 mL / 1,000 mg nicotine

Disposable Devices and Hazardous Metals

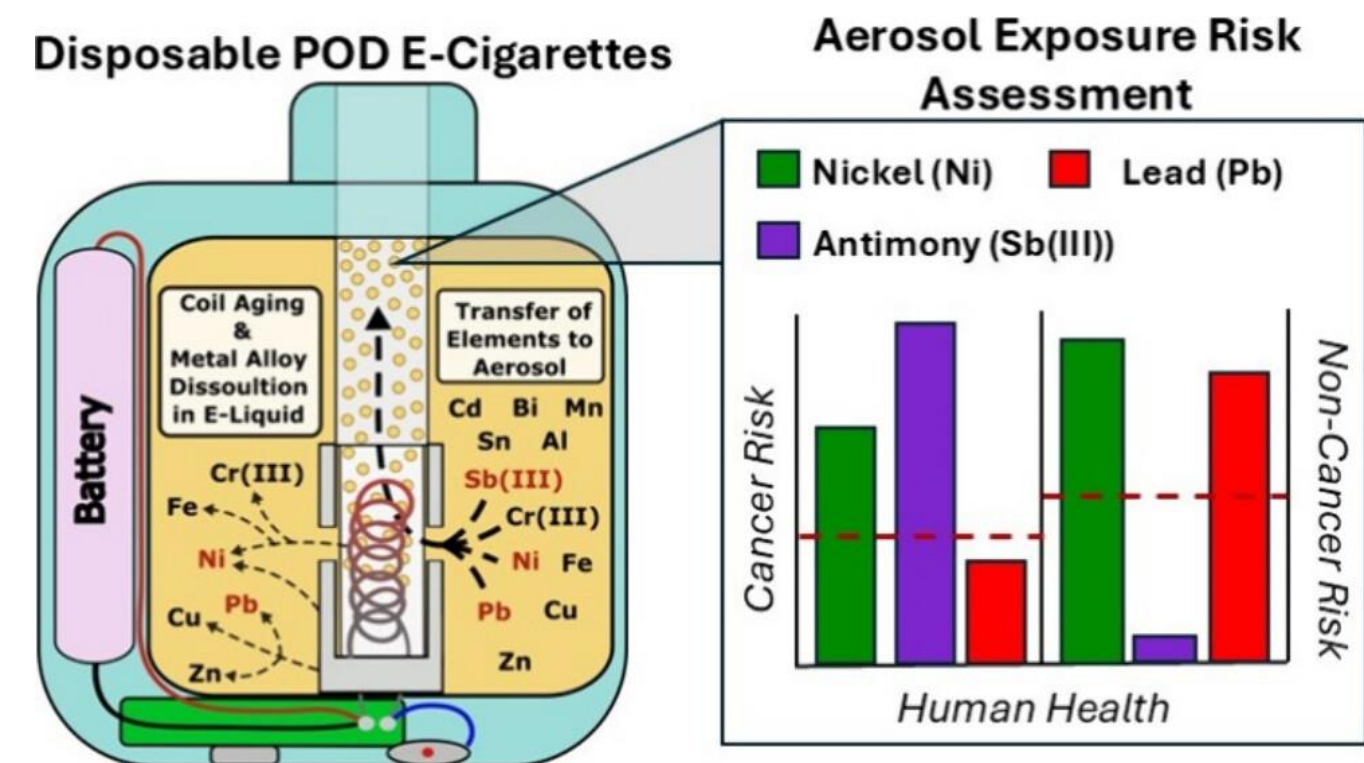
Researchers tested Esco Bar, Flum Pebble, and ELF Bar.

Heating coil elements (chromium (Cr), nickel (Ni)) likely leached into e-liquids and aerosols from coil degradation during use.

Levels of chromium, nickel and antimony **increased as the number of puffs increased**.

Most of the disposable e-cigarettes tested released markedly **higher amounts of metals and metalloids into vapors** than earlier, refillable vapes.

In Esco Bar devices, high concentrations of lead (Pb), Ni, copper (Cu), and zinc (Zn) were observed in the e-liquids and aerosols. The **illicit use of leaded bronze** in non-heating device components in contact with e-liquid was the source of Pb.





Oral Nicotine is NOT Risk-Free

Oral nicotine use can cause mouth lesions, nausea, throat pain, and greater risk of tooth decay

Some products have considerably higher levels of nicotine than cigarettes and other smokeless tobacco products

- Increased risk of cardiovascular diseases due to increased heart rate and blood pressure

Missing Longitudinal Data

New and emerging products have limited scientific data and majority of studies focus on short-term health effects

Products change often and characteristics of them are different based on brand, nicotine concentration, flavors/additives, etc.

Behavior changes based on product used and level of addiction (i.e., frequency of use of product, how product is used, amount of nicotine consumed, etc.)

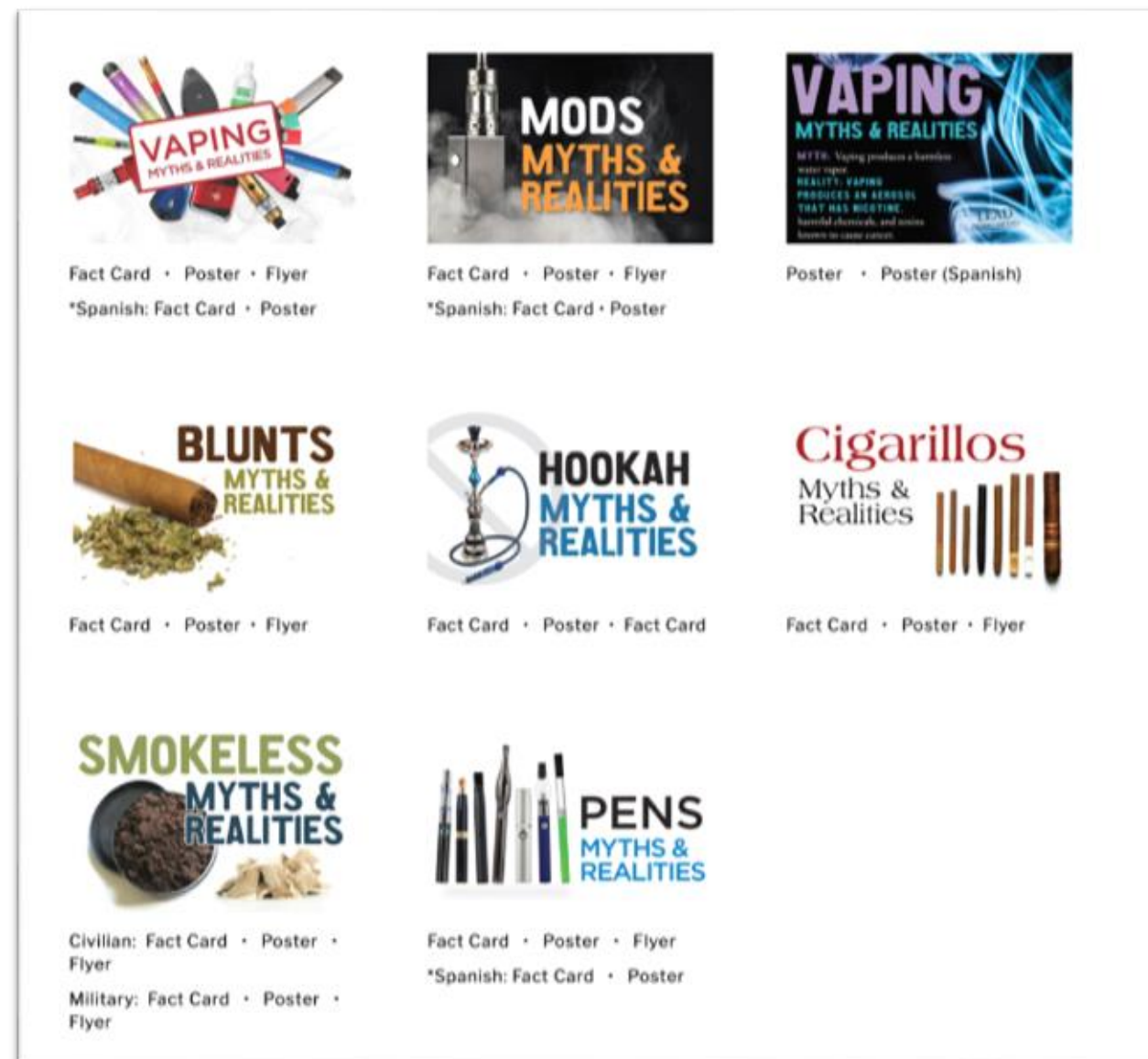


Youth

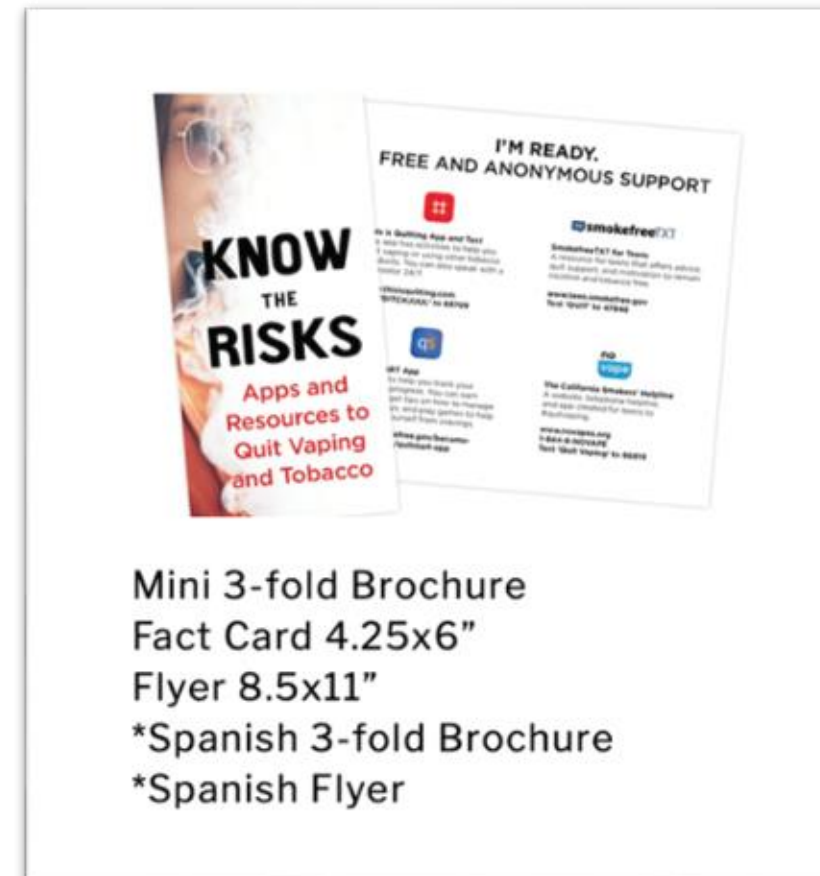
Resources



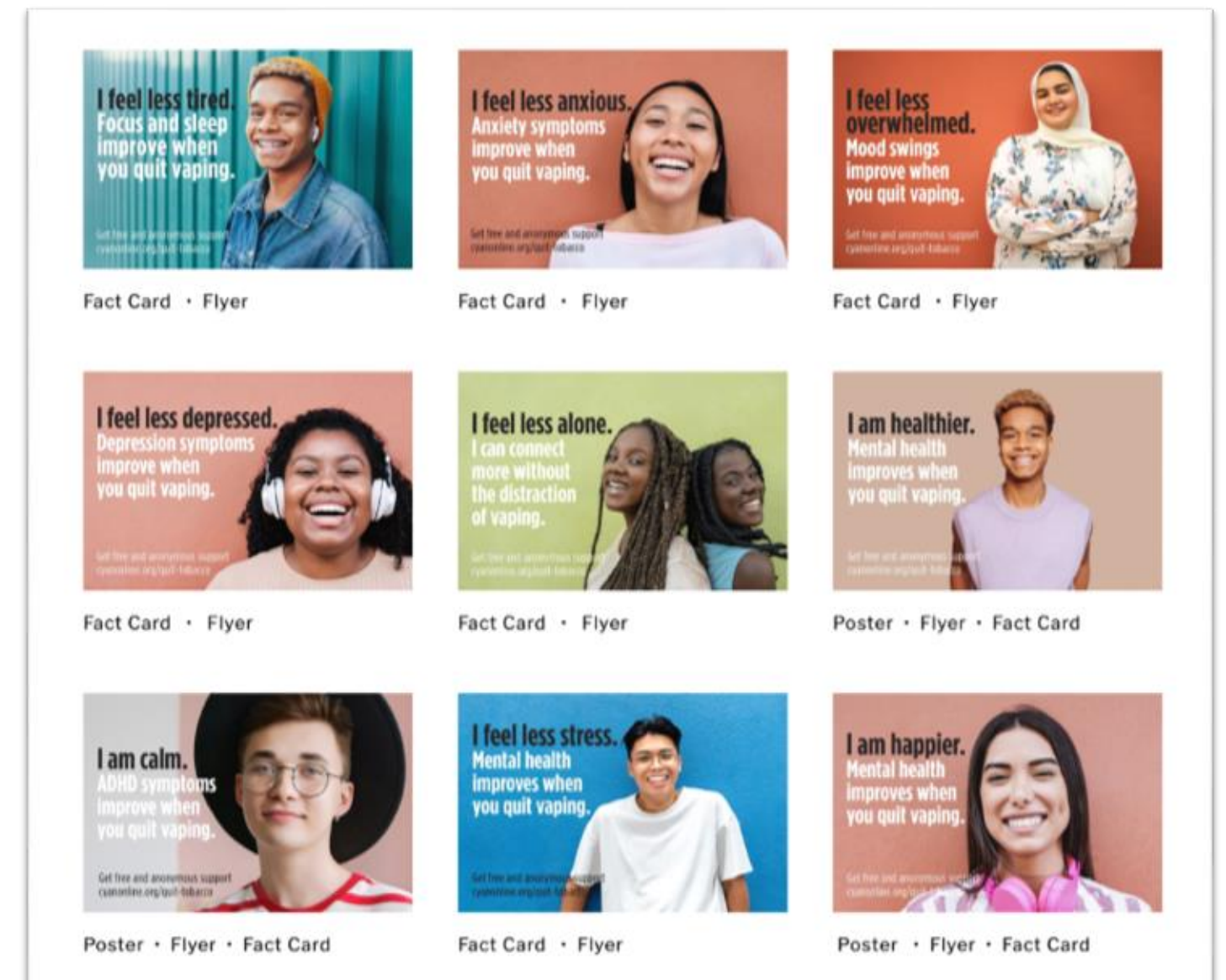
Prevention + Increase Knowledge



Cessation + Connect to Resources



Motivate Behavior Change + Connect to Resources





Intervention

Intervention strategies like individual or group counseling, intensive educational programs, and peer-to-peer programs can help move students toward quit attempts and cessation.

Alternatives to Suspension (ATS)

“Alternative to suspension” strategies focus on non-punitive approaches to discipline. Instead of suspending students for tobacco-related incidents,



Thank you!

Contact Us

Kim Homer Vagadori, MPH
kim@cyanonline.org

cyanonline.org
catobaccofreecolleges.org

