### THE REAL COST: TACKLING TEEN VAPING

Presented by Kathleen Crosby Director, Office of Health Communication & Education FDA Center for Tobacco Products

Disclaimer: This is not a formal dissemination of information by FDA and does not represent Agency position or policy.

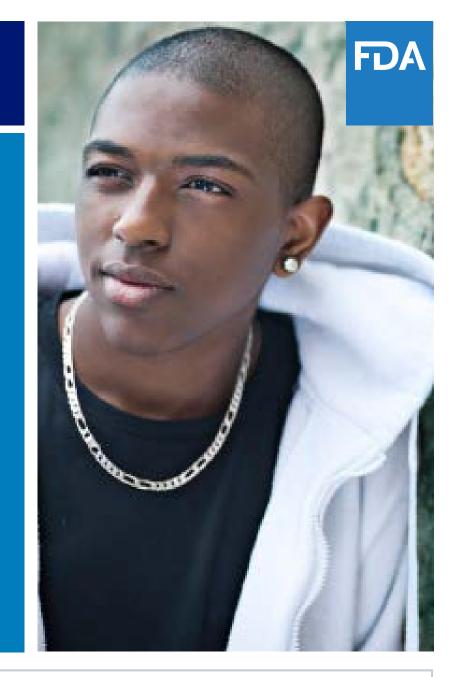


#### CENTER FOR TOBACCO PRODUCTS

October, 2020

### AGENDA

- Changing Youth Behaviors Toward Using ENDS
- Update on FDA's Policies in 2020
- How The Real Cost Campaign Is Helping
- Questions/Discussion



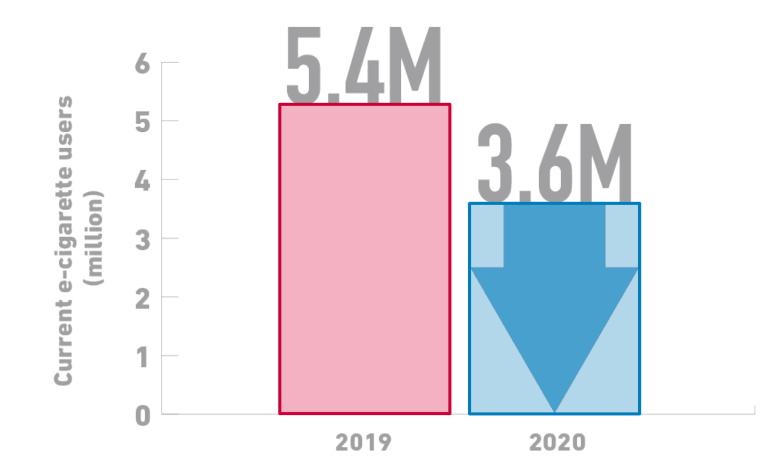


## CHANGING BEHAVIORS TOWARD USING ENDS: 2020 NYTS DATA



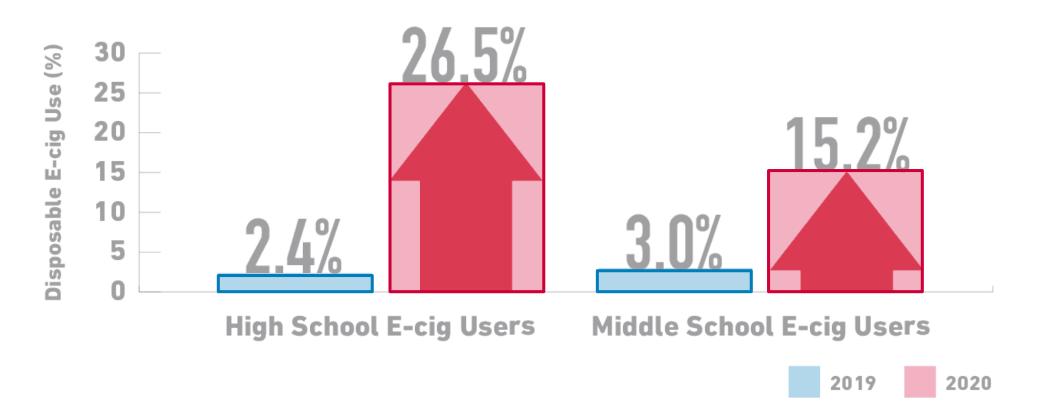


### NYTS 2020: SIGNIFICANT DECLINE IN YOUTH E-CIG USE; BUT LEVELS REMAIN HIGH



#### Source: NYTS 2020

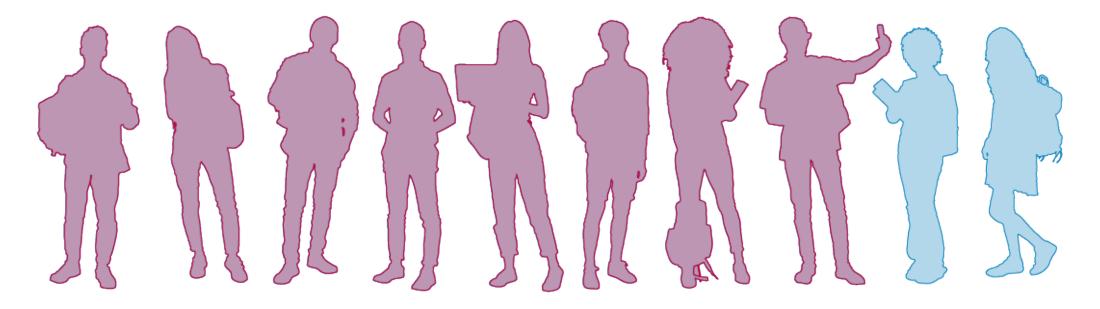
## NYTS 2020: CONCERNING RISE IN THE USE OF DISPOSABLE E-CIGS



#### Source: NYTS 2020

### NYTS 2020: HIGH LEVELS OF FLAVORS USE; FRUIT, MINT, CANDY & MENTHOL AMONG MOST COMMON

# More than **8 out of 10** current youth e-cig users use flavored e-cigs



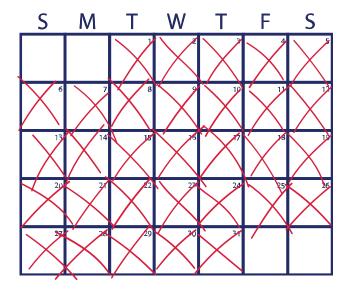
Source: NYTS 2020

### SIGNS OF ENDS ADDICTION; FREQUENCY OF USE



### 22.5%

of high school current e-cig users used e-cigs daily



Source: NYTS 2020

6 October, 2020 | The Real Cost: Tackling Teen Vaping |

**CENTER FOR TOBACCO PRODUCTS** 

**D** 

### UPDATES ON FDA'S POLICIES IN 2020



### ENFORCEMENT PRIORITIES GUIDANCE

- On Jan. 2, 2020, FDA announced a policy prioritizing enforcement against certain unauthorized flavored e-cigarette products that appeal to children
- On Feb. 6, 2020, FDA began prioritizing enforcement against certain illegally marketed ENDS products that do not have premarket authorization:
  - Any flavored, cartridge-based ENDS product (other than a tobacco- or menthol-flavored ENDS)
  - All other ENDS products for which the manufacturer has failed to take adequate measures to prevent minors' access
  - Any ENDS product that is targeted to minors or likely to promote use of ENDS by minors
    - Took enforcement actions against Puff Bar and MYLE due to their youth marketing practices

### **ENFORCEMENT PRIORITIES**



- After Sept. 9, 2020, FDA is also **prioritizing enforcement against any ENDS product** that continues to be sold and for which the agency has not received a product application
- New data, such as that from the 2020 NYTS, will inform the FDA's enforcement and other actions, and **flavored disposable ENDS will be an enforcement priority** for the agency

### PREMARKET PRODUCT REVIEW SUBMISSION



- Applications for premarket review for certain deemed new tobacco products on the market as of Aug. 8, 2016—including e-cigarettes—were required to be submitted to FDA by Sept. 9, 2020
- For companies that submitted timely applications, FDA may continue to exercise enforcement discretion until Sept. 9, 2021 – unless a negative action is taken by the FDA on an application during that time
- FDA plans to post a list of the deemed new tobacco products that were on the market in the U.S. as of Aug. 8, 2016, are still on the market now, and for which a premarket submission was made by Sept. 9, 2020
  - However, FDA must ensure that publishing complies with federal disclosure laws and regulations

### PLANS FOR PREMARKET PRODUCT REVIEW

 FDA strives to review as many applications as possible during this one-year period and the agency will allocate reviewing resources to ensure we focus on products with the greatest public health impact while also committing to fairness to all companies regardless of size



 FDA plans to update the public and release information regularly as the agency refines plans for allocating product review resources and the process by which products would move into scientific review

FD

### CIGARETTE HEALTH WARNINGS FINAL RULE

FDA

- On March 17, 2020, FDA issued a final rule to require 11 new health warnings on cigarette packages and in cigarette advertisements to promote greater public understanding of the negative health consequences of cigarette smoking
  - The proposed rule was issued in August 2019
- **Beginning Oct. 16, 2021**\*, the warnings will be required to appear prominently on cigarette packages and in advertisements, as shown in the below examples:



Occupying the top 50 percent of the area of the front and rear panels of cigarette packages



Occupying at least 20 percent of the area at the top of cigarette advertisements

\*The effective date was recently postponed by 120 days from June 18, 2021 to Oct. 16, 2021 due to COVID-19 and its impacts

### NEW LEGISLATION: TOBACCO 21



- On Dec. 20, 2019, the President signed legislation amending the Federal Food, Drug, and Cosmetic Act, and raising the federal minimum age of sale of tobacco products from 18 to 21 years
- Effective immediately, retailers must not sell any tobacco products including cigarettes, smokeless tobacco, hookah tobacco, cigars, pipe tobacco, electronic nicotine delivery systems including e-cigarettes and e-liquids – to anyone under 21
- FDA expects retailers to follow the law and take measures to ensure an individual purchasing a tobacco product is 21 or older, including manually checking IDs when needed
- FDA had begun utilizing individuals under the age of 21 in its nationwide compliance check inspection program to determine retailer compliance prior to the COVID-19 outbreak

### HOW THE REAL COST IS HELPING



### MAKING A SIGNIFICANT PUBLIC HEALTH IMPACT



Campaign development and planning

Advertising and messages delivered to target audiences (TV, radio, print, digital online, out-of-home)

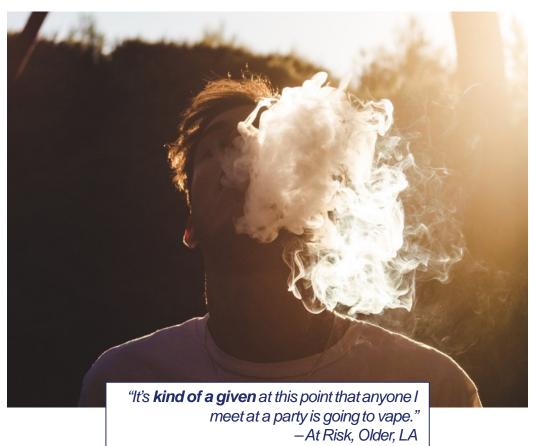
15 October, 2020 | The Real Cost: Tackling Teen Vaping |



### CURRENT STATE OF YOUTH VAPING HOW TEENS PERCEIVE AND SEE VAPING IN THEIR LIVES RIGHT NOW

#### VAPING CONTINUES TO BE A NORMALIZED PART OF THEIR LIVES

- School bathrooms are the *nerve center* of teen vaping – to the point that several respondents reported that their schools have gone on "bathroom lockdown" to discourage the practice
- As they see vaping spread throughout their social circles, they are wondering as much about the societal impact of vaping as its effect on individuals
- Some younger respondents reported not seeing a lot of vaping among their peers, but they were still very familiar with vaping and seemed to have a good understanding of it



## SOCIAL MEDIA HAS THE POWER TO PROPAGATE THE HABIT/TREND BUT ALSO GIVE THEM PAUSE

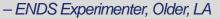
- Social media can glamorize vaping, so many go on there to "showcase" their habit, whether it's through tricks or just to do it
- It's also where stories about negative consequences can spread more quickly and grab their attention



"You definitely see a lot of celebrity influencers and Instafamous people vaping on social media, and I do think that some people start vaping because everyone wants to look like an Instagram star."

- ENDS Experimenter, Older, NJ

"There's this really popular post going around that has had a serious impact. People are actually choosing to stop JUULing now because there's this guy whose lung popped. It caused deflation and he ended up in the hospital."





D)

### VAPING CONTINUES TO REMAIN "CLIQUE AGNOSTIC"

- From valedictorians to star basketball players, vaping doesn't seem to discriminate
- At risk and younger teens are likelier to make judgments about teens who vape

"Almost everyone vapes. It's not like, 'It's just the cool kids or it's just the jocks.' It's the church girls, it's everybody." – ENDS Experimenter, Older, ATL "Valedictorians vape." – At Risk, Older, ATL

"I don't think there's a certain type of people that vape" – HH ENDS Experimenter, Older, LA

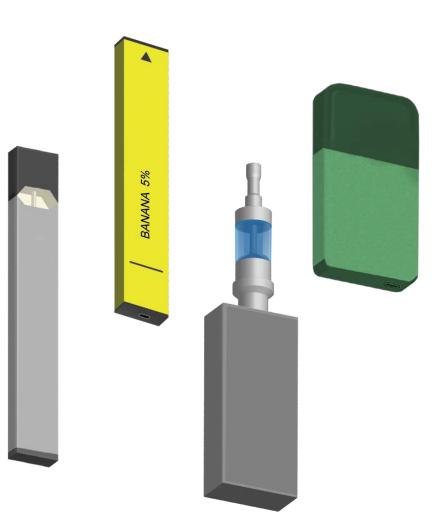
> "It doesn't matter if you're going to a Brockhampton show or to see a local punk band, **everyone there** is going to be vaping." – ENDS Experimenter, Older, LA



FD/

### TEENS ARE EXPLORING VAPING OPTIONS

- Teens are becoming a bit more brand agnostic as they become familiar with more pod mod and disposable brands
- Availability, convenience are flavor selection are the key
- A "fiending" teen will not be picky when taking a hit from a friend's vape
- Disposable vapes have gained popularity because they are cheaper, easier to find, and easier to sell
- Some also mentioned refillable options are becoming popular



### TEENS OFTEN MENTIONED THE EMOTIONAL DEPENDENCE THAT CAN RESULT FROM VAPING, NOT JUST THE PHYSICAL

- Some teens were able to talk about peers or friends who just couldn't live without it and felt more secure when they had their vape
- When they can't access their vapes, teens start to "fiend" – acting angry, emotional, and irrational. Some teens suggest that vapers start to exhibit these emotional characteristics throughout their daily lives

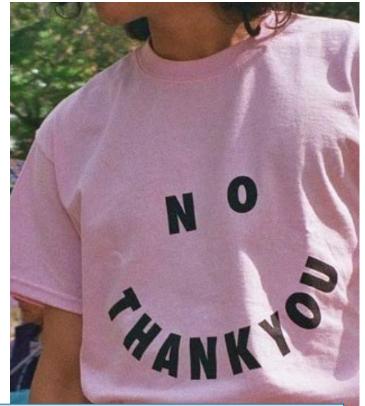


"I remember one time before a cheer competition this girl **had a panic attack**, she was like 'I need my Suorin, I need my Suorin.' We all ran to the bathroom right before we went on so she could hit it." – ENDS Experimenter, Older, LA

FD/

### ADDICTION IS NOW SOMETHING TEENS ARE STARTING TO PAY ATTENTION TO, BUT STILL WANT THE FULL STORY ON THE DANGER

- Previously, addiction wasn't something that teens took seriously – they would associate being to addicted to vaping with being addicted to "chocolate" or "my phone"
- In this research, most teens agreed that vaping can be addictive, but they wanted a better understanding of the risks and ultimate consequences that could come from it – especially pertaining to harms to the lungs
- Not knowing the full story on addiction was now seen as more of a problem/question vs. something to ignore



HD)

"I think vapes might be equally as bad as cigarettes because a lot of people don't really see how dangerous vaping is and people suck down a whole pod in 20 minutes, which is like a whole pack of cigarettes."- At Risk, Older, NJ

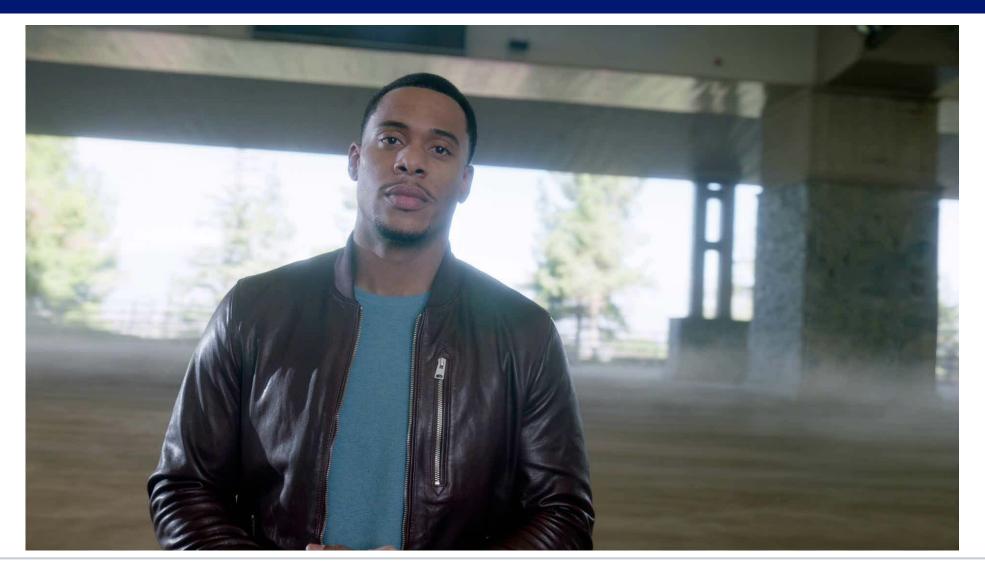


### RESEARCH FINDINGS LED TO NEW ADS FOR 2020



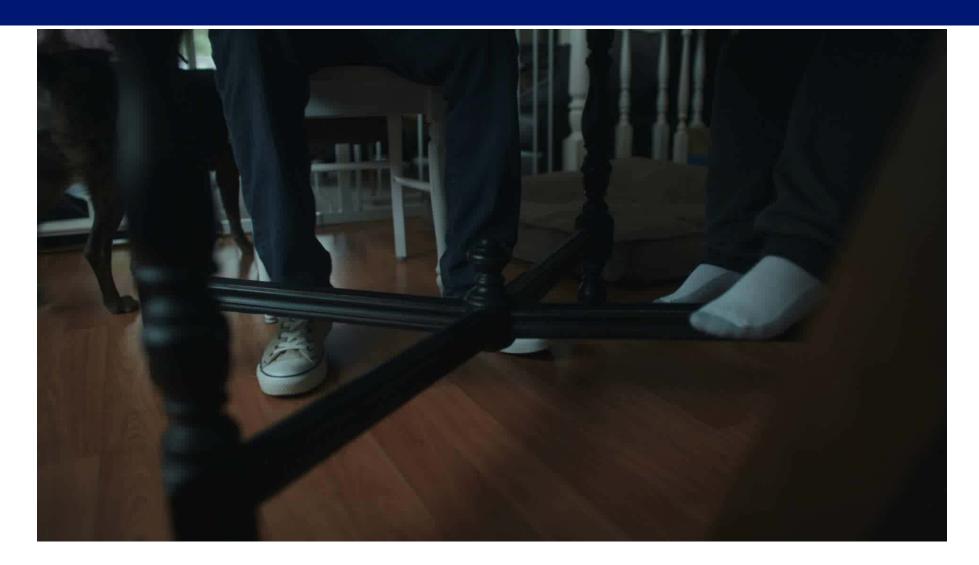
### METALS – SCARY ENOUGH





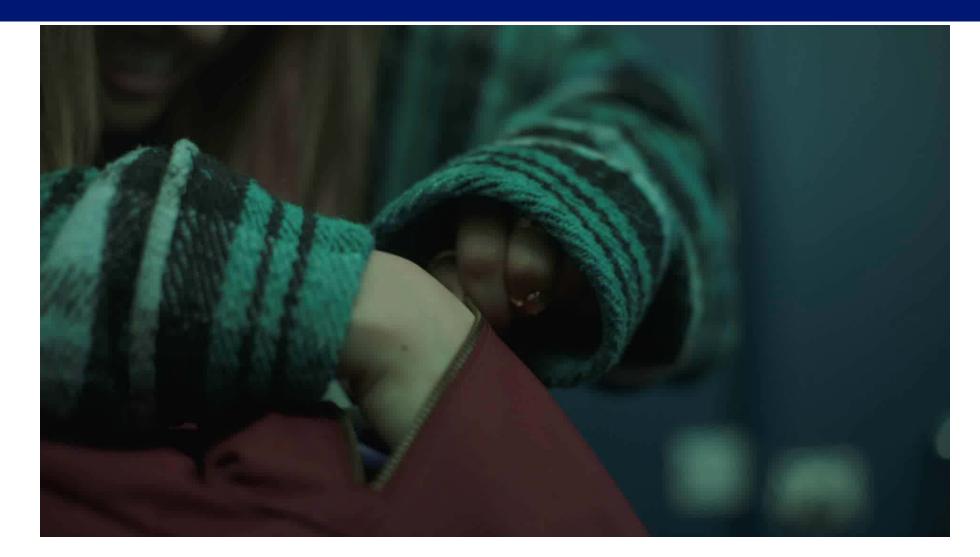
### ADDICTION – PURSE





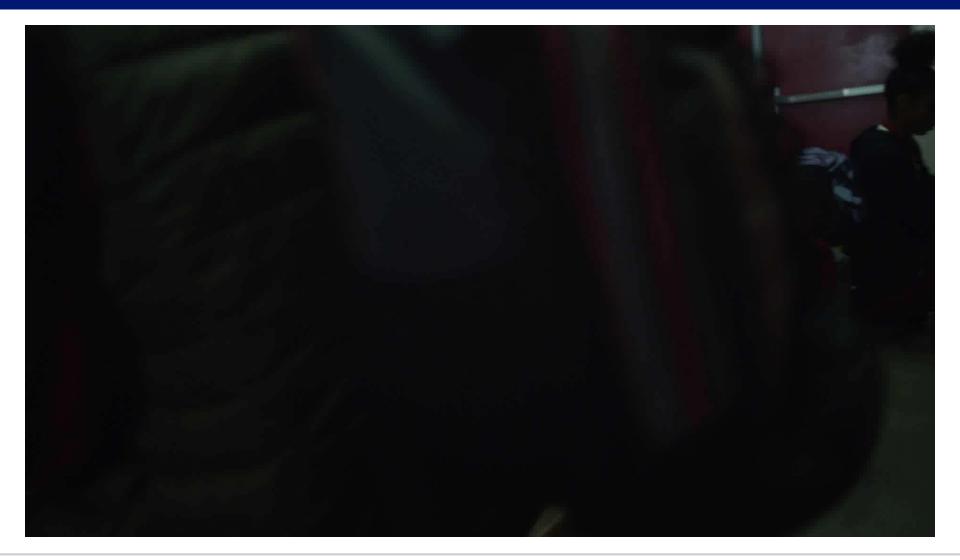
### ADDICTION - TOILET





### ADDICTION - ATHLETE







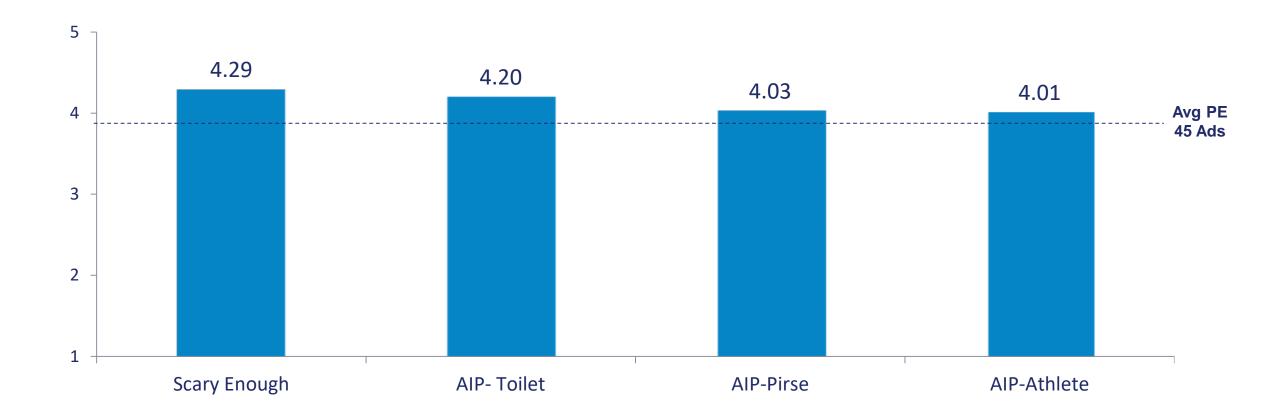
### QUANTITATIVE COPY TESTING ENSURES ADS WILL HAVE AN IMPACT



### **BOTTOM LINE UP FRONT**

- Excellent Perceived Ad Effectiveness scores all above 4.0.
- No unintended consequences.
- All Knowledge, Attitude, and Belief (KAB) and behavioral intention measures saw statistically significant movement in the desired direction.
- The majority of youth understand the main message of the ads and the ads perform well on other measures.

### PERCEIVED AD EFFECTIVENESS SCORE – COMPARISON



**CENTER FOR TOBACCO PRODUCTS** 

**FD** 

### MAIN MESSAGE – UNAIDED RECALL

Out of 150 Respondents, the total that understood the main message:

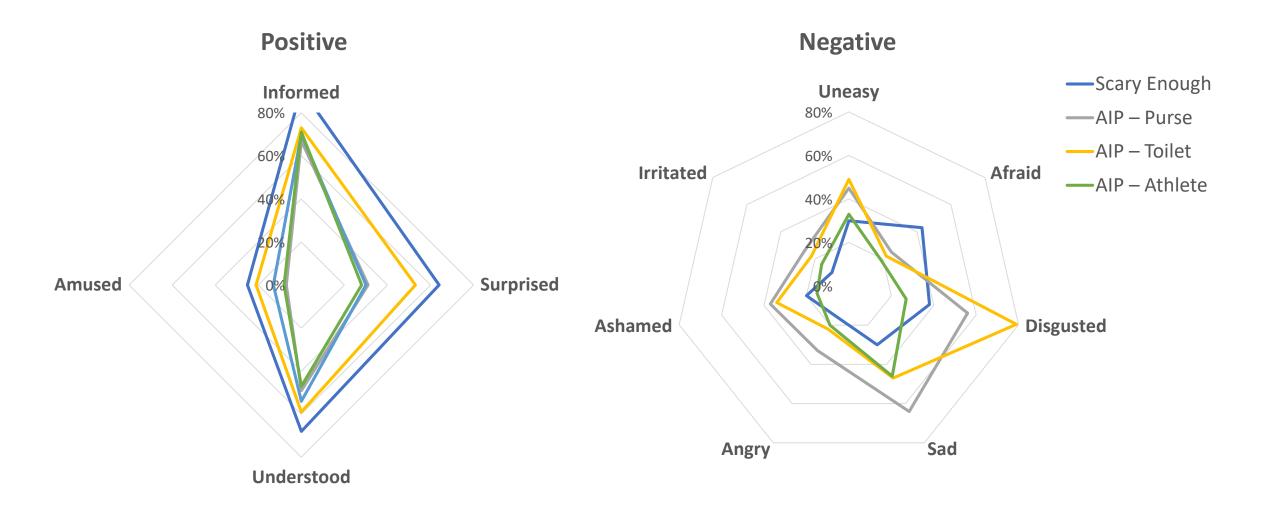
- Scary Enough 82%
- Addiction Isn't Pretty (Purse) 74%
- Addiction Isn't Pretty (Toilet) 80%
- Addiction Isn't Pretty (Athlete) 83%

B1. Imagine you are talking to a friend; how would you describe the main message of the ad to them?

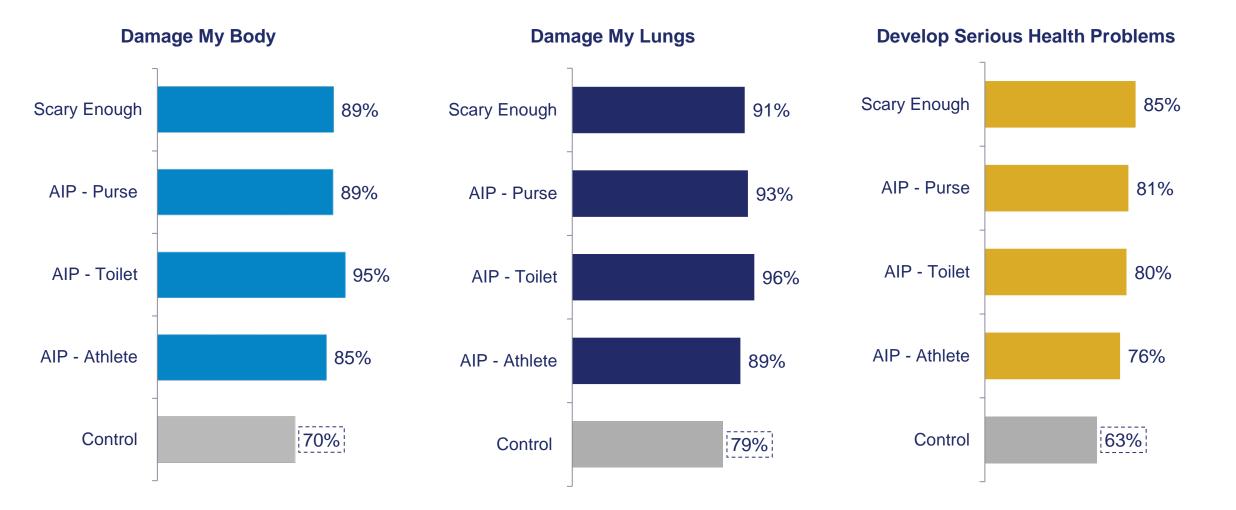


### EMOTIONAL REACTION COMPARISON





## ALL HEALTH-RELATED KABs MOVED IN THE DESIRED DIRECTION

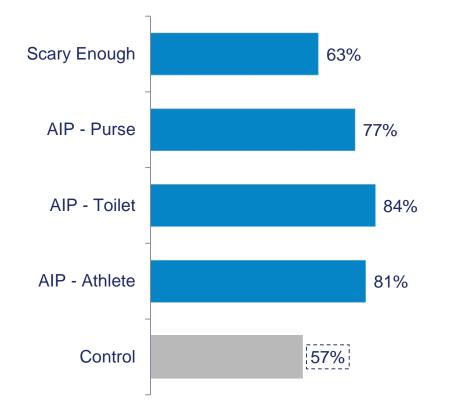


**CENTER FOR TOBACCO PRODUCTS** 

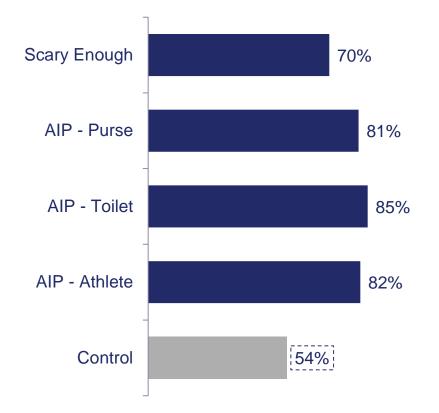
## ALL ADDICTION-RELATED KABs MOVED IN THE DESIRED DIRECTION



**Be Controlled by Addiction** 

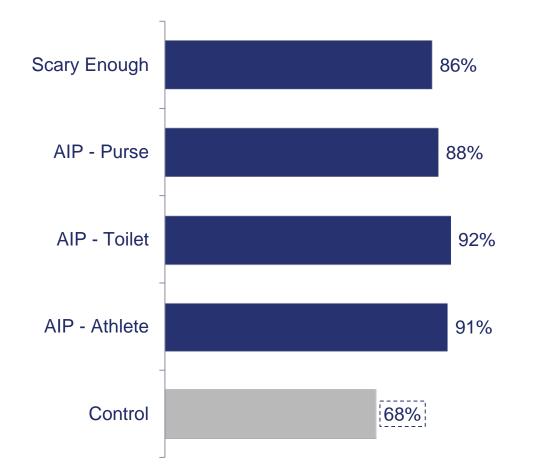


**Become Addicted to Vaping** 

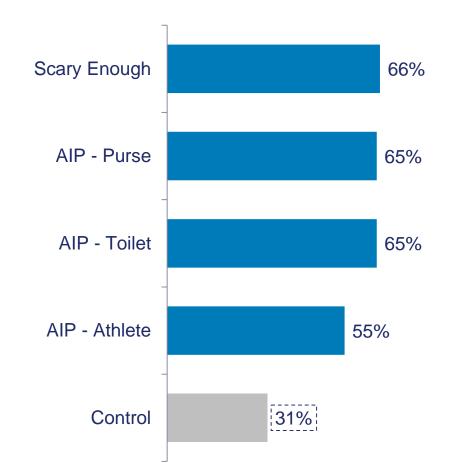


### INTENTIONS TO USE ENDS BY TOBACCO USER TYPE

**At-Risk Non-Triers** 



#### **Youth Experimenters**







- All ads performed well in terms of perceived effectiveness and main message comprehension (excellent PE scores, high main message comprehension).
- No unintended consequences all KAB and behavioral intention measures saw statistically significant movement in the desired direction.



### PLACING ADS THAT REACH TEENS WHERE THEY ARE



### REACHING TEENS WHERE THEY WANT TO BE

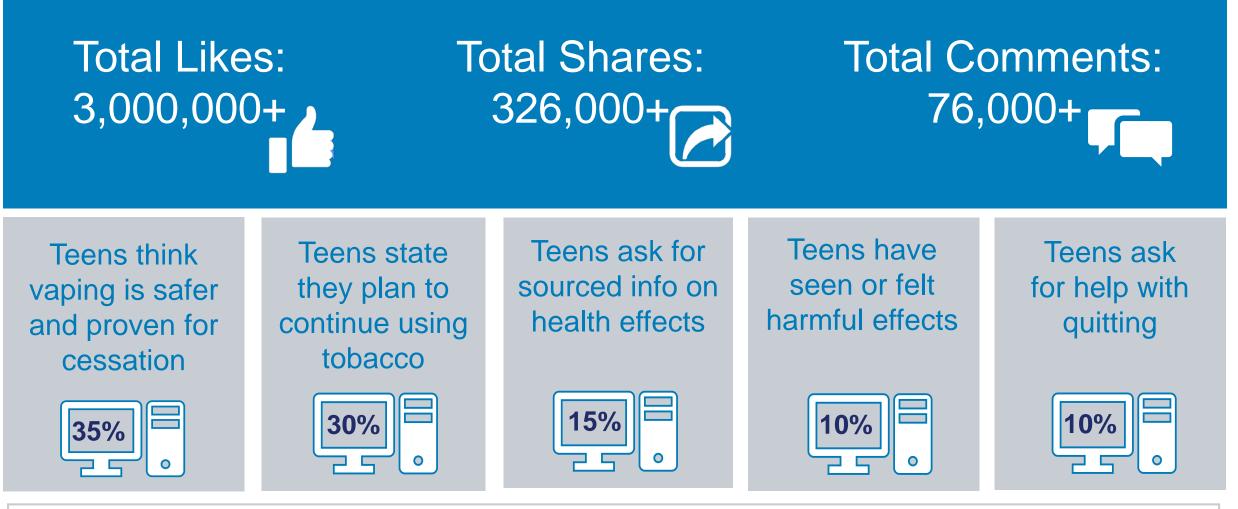
- 'The Real Cost' Youth E-Cigarette Prevention Campaign is laser-targeting the media to effectively reach 12- to 17-year-olds via their media passion points
- Nearly 10.5 Billion teen impressions (eyes on messaging) since campaign launched



FD/

### ENGAGING WITH TEENS SINCE LAUNCH





**CENTER FOR TOBACCO PRODUCTS** 

#### PARTNERING WITH NCI TO HELP WITH TEEN CESSATION CONTENT

NCI and CTP launched new e-cigarette cessation content on SmokeFree Teen, giving comprehensive behavioral techniques help teens deal with cravings, navigate peer pressure, prepare to quit, and make it through their quit day

Since July 2019, there have been over one million page views

The most time is spent on these pages:

- How to Quit Vaping over 4 minutes
- Vaping Addiction and Nicotine Withdrawal over 5 minutes

### YOUTH E-CIGARETTE PREVENTION IN SCHOOLS

- Collaboration with Scholastic to bring lesson plans, infographics, and scientific facts to more than a million middle and high school teachers nationally
- New resources in English and Spanish released in 2020, including two new lessons and worksheets, five short videos focused on content areas that align with e-cigarette prevention lesson plans

www.scholastic.com/youthvapingrisks



#### **CENTER FOR TOBACCO PRODUCTS**

FD/

### ADDITIONAL MATERIALS AVAILABLE ON CTP'S EXCHANGE LAB

Free print materials, web content and social media content are available to download and order on CTP's Exchange Lab:

https://digitalmedia.hhs.gov/tobacco/

IF YOU DON'T THINK VAPING IS ADDICTIVE, IT MAY HAVE ALREADY ALTERED YOUR BRAIN.

The nicotine in vapes can disrupt the development of the teenage brain and lead to addiction.

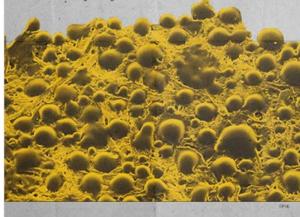
FDA U.S. FOOD & DRUG

You may not be into chemistry, but if you vape, chemistry may be very into you.

FDA U.S. FOOD & DRUG

formaldehyde

Vaping can expose you to carcinogens like formaldehyde, and other toxic chemicals that can cause lung damage.





### THANK YOU! QUESTIONS?

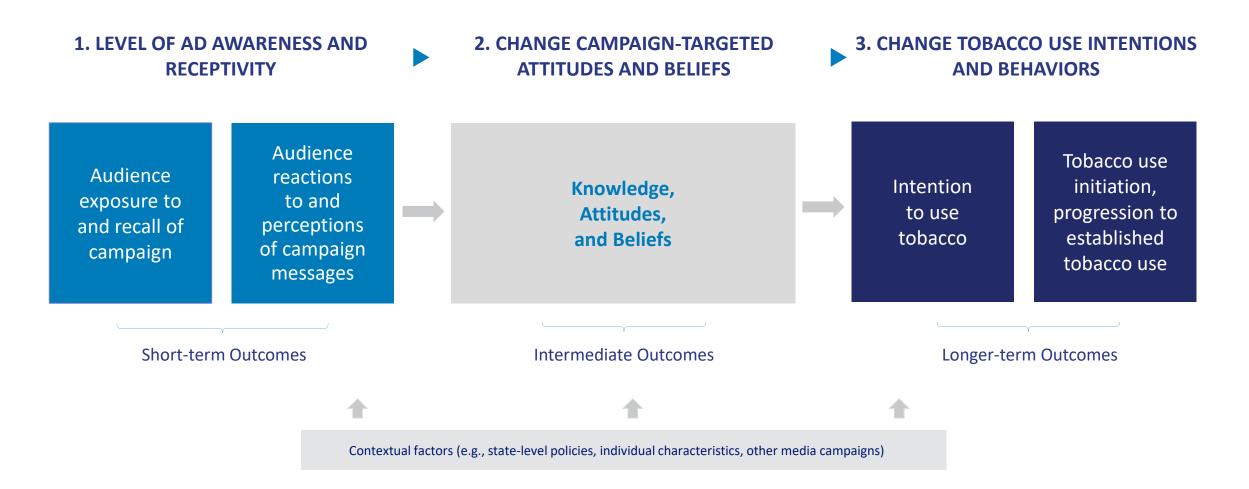




### APPENDIX: EVALUATION RESULTS TO DATE

### LOGIC MODEL: THREE SEQUENTIAL STEPS LEADING TO BEHAVIOR CHANGE



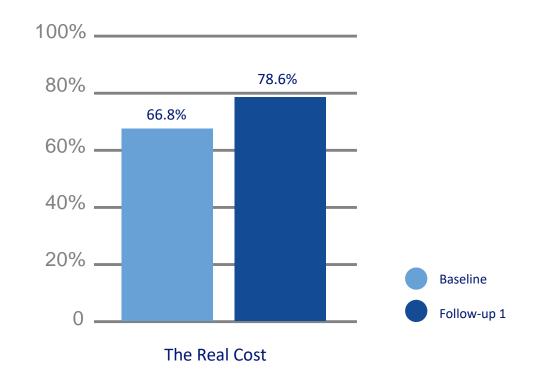


**CENTER FOR TOBACCO PRODUCTS** 

### BRAND AWARENESS AND RECEPTIVITY REMAINS HIGH FOR THE VAPING PREVENTION CAMPAIGN

## THE REAL COST

# **79%** of youth recalled seeing The Real Cost brand logo



FD/

FDA

Beliefs and risk perceptions about vaping are rapidly evolving

29 of 36 items assessing youth beliefs about vaping changed in the direction of increased perceptions of risk and improved knowledge of harm

#### For example, U.S. youth nationwide who believe\*:

"If I vape I will deliver nicotine to my brain" increased 13%

"Vaping makes you more likely to smoke cigarettes" increased 16.7%

"Vapes contain formaldehyde" increased 20%

\*Relative Change

47 October, 2020 | The Real Cost: Tackling Teen Vaping |