Vaping: Evidence-based Prevention Efforts to Address Vaping Among Youth

Chuck Klevgaard,
Prevention Manager

Great Lakes Prevention Technology Transfer Center PTTC

July 1, 2021

Brought To You By:

The Great Lakes ATTC, MHTTC, and PTTC are funded by the Substance Abuse and Mental Health Services Administration (SAMHSA under the following cooperative agreements:

Great Lakes ATTC: 1H79TI080207-03
Great Lakes MHTTC: IH79SM-081733-01
Great Lakes PTTC: 1H79SP081002-01

Disclaimer

This presentation was prepared for the Great Lakes PTTC under a cooperative agreement from the Substance Abuse and Mental Health Services Administration (SAMHSA). All material appearing in this presentation, except that taken directly from copyrighted sources, is in the public domain and may be reproduced or copied without permission from SAMHSA or the authors. Citation of the source is appreciated. Do not reproduce or distribute this presentation for a fee without specific, written authorization from the Great Lakes PTTC.

At the time of this presentation, Tom Coderre, serves as Acting SAMHSA Assistant Secretary. The opinions expressed herein are the views of the speakers and do not reflect the official position of the Department of Health and Human Services (DHHS), SAMHSA. No official support or endorsement of DHHS, SAMHSA, for the opinions described in this document is intended or should be inferred.

January 2021

The use of affirming language inspires hope.

LANGUAGE MATTERS.

Words have power.

PEOPLE FIRST.

The PTTC Network uses affirming language to promote the application of evidence-based and culturally informed practices.

Thank You for Joining Us!

A few housekeeping items:

- If you are having technical issues, please individually message Kristina Spannbauer or Stephanie Behlman in the chat section and they will be happy to assist you.

- Please put any questions for the speaker or comments in the Q & A section, also at the bottom of the screen. We will respond to questions during the presentation.

- We will be using automated transcriptions for todays webinar.

Thank You for Joining Us!

A few more housekeeping items:

- You will be directed to a link at the end of the presentation to a very short survey – we would really appreciate it if you could fill it out. It takes about 3 minutes.
- We are recording this session and it will be available on our website in a couple of weeks.
- Certificates of attendance will be sent out to all who attended the full session. They will take about 2 weeks.

Follow Us On Social Media!

Facebook and Twitter:

- @GreatLakesATTC
- @GMhttc
- @GLPTTC

Look for our weekly updates in your email on Thursdays for events coming the following week

Photo: iStock

Speaker Introductions

Chuck Klevgaard

VAPING: EVIDENCE-BASED PREVENTION EFFORTS TO ADDRESS VAPING AMONG YOUTH

Chuck Klevgaard, Prevention Manager

Great Lakes Prevention Technology Transfer Center PTTC

July 1, 2021

OBJECTIVES

1. Describe a brief history of vaping in the US
2. Identify evidence-based prevention strategies and promising approaches for prevention
3. List cross-sector approaches for comprehensive vaping prevention

E-CIGARETTES ENTER THE MARKET

E-cigarette use among middle and high school students increased 900% during 2011-2015

One-third of middle and high school students who ever used e-cigarettes had used marijuana in e-cigarettes.

1 in 5 high school students currently use e-cigarettes.

2007 2009 2011 2013 2015 2017 2019

PACT ACT

E-cigarettes entered the U.S. marketplace

Center for Tobacco Products - CTP is established; (Public education, Policy, Research) FDA announces a ban on combustible tobacco cigarettes with fruit, candy, or clove flavorings.

E-cigarettes becomes the most commonly used tobacco by U.S. Youth, 3.26 Million have used a flavored product

National Academy of Sciences Report concluded that evidence that e-cigarette use increases the frequency and intensity of cigarette smoking in the future.

RAPID UPTAKE: LIKELY FACTORS

Adolescents' Use of "Pod Mod" E-Cigarettes — Urgent Concerns

Jessica L. Barrington-Trimis, Ph.D., and Adam M. Leventhal, Ph.D.

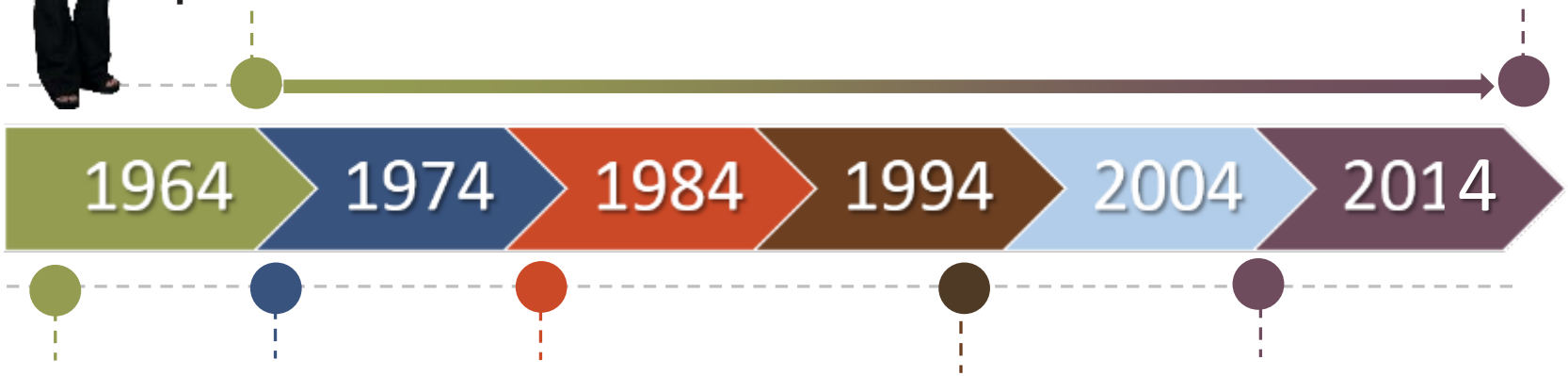
Adolescents' use of electronic cigarettes initially took the public health community by surprise. In 2011, less than 2% of U.S. high school students reported having used e-cigarettes in the previous month. But by 2015, the percentage had jumped to 16%. The following year, the U.S. Surgeon General issued a report concluding that e-cigarette use among young people was "a public health concern." Ensuing public education campaigns and policies helped bring the prevalence of past-month e-cigarette use among U.S. high school students down to 11% in 2016.[1]

A recent evolution in technology and marketing may threaten this progress. A new product class called "pod mods" — small, rechargeable devices that aerosolize liquid solutions containing nicotine, flavoring, and other contents encapsulated in cartridges (see graphic) — appears to be gaining traction. Media stories about Juul, a popular pod mod brand, highlight anecdotal reports from students, parents, teachers, and school superintendents indicating that use of these products is rampant among young people. According to Nielsen data, as of January 27, 2018, Juul had captured 49.6% of the e-cigarette market.[2] There is reason to be concerned that adolescents' use of pod mods is not a passing trend and could bring a host of adverse health consequences to the current generation of adolescents and young adults.

Pod mods may deliver high levels of nicotine with few of the deterrents that are inherent in other tobacco products. Traditional e-cigarette products use solutions with free-base nicotine formulations in which stronger nicotine concentrations can cause aversive user experiences. Juul and other pod mods use protonated

FIFTY YEARS OF TOBACCO CONTROL

The adult smoking rate in the U.S. slashed by more than half since 1965, from 42.4 percent to 18 percent in 2012



Defeating big tobacco seemed impossible

The 1972 Surgeon General's report became the first of a series of science-based reports to identify environmental tobacco smoke (ETS) as a health risk to nonsmokers.

Prevention campaigns, higher tobacco taxes, and smoking bans begin

1998, the tobacco industry approved to a 46-state Master Settlement Agreement, the largest settlement in history, totaling nearly $206 billion

In 2009, Family Smoking Prevention and Tobacco Control Act, giving the U.S. Food and Drug Administration (FDA) comprehensive authority to regulate the manufacturing, marketing, and sale of tobacco products. CTP is formed

MORE RECENT POLICY HISTORY

By 2019, 50 percent of the population now lives in a state or community that has passed a Tobacco 21 law.

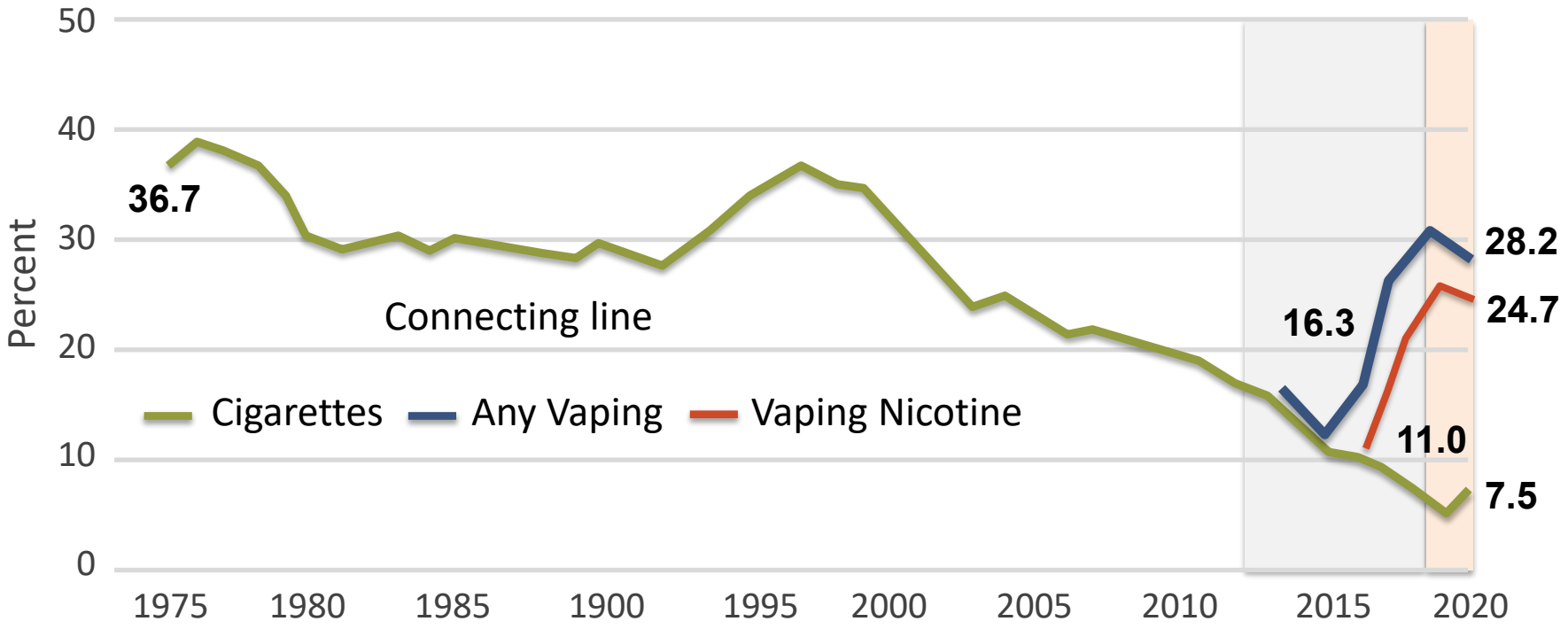
2017 2019 2020 2021

On March 27, 2021, Congress amended the Preventing All Cigarette Trafficking (PACT Act) to include new regulations regarding the delivery and sales of electronic nicotine delivery systems (ENDS), which include e-cigarettes, "vapes", flavored and smokeless tobacco.

Preventing Online Sales of E-Cigarettes to Children Act. Puts Vaping into the PACT ACT (*anything* that can be used to vape *any* liquid – or oil – based substance)

Alcohol & Tobacco | Bureau of Alcohol, Tobacco, Firearms and Explosives (atf.gov)
https://www.atf.gov/alcohol-tobacco

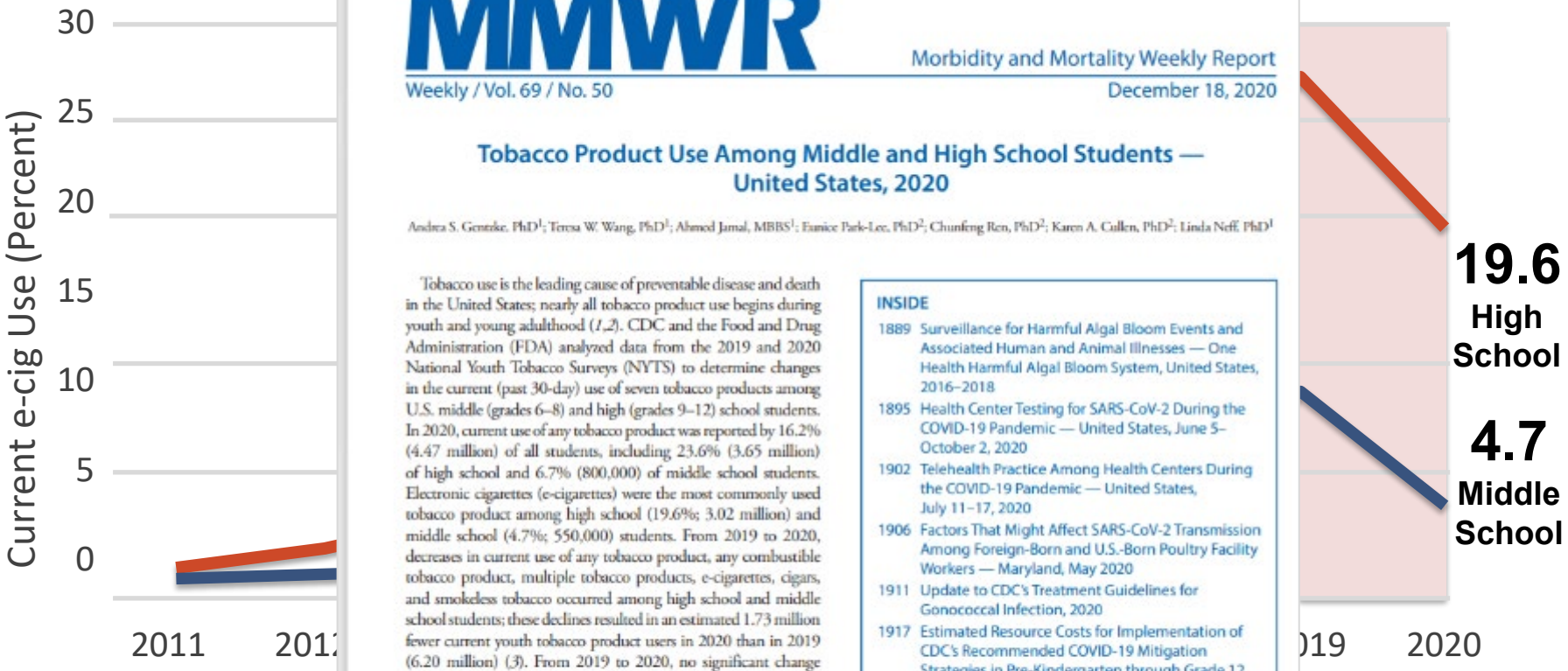
CIGARETTE USE AND VAPING
12TH GRADE, LAST 30 DAYS, 1975-2020



*Data Collection for 2020 stopped in March due to the pandemic
Source: National institute on Drug Abuse and University of Michigan's Institute for Social Research, Monitoring the Future Survey

SHARP DECLINE IN YOUTH E-CIGARETTE USE

1.8 MILLION FEWER USERS SINCE LAST YEAR



Centers for Disease Control and Prevention

MMWR

Morbidity and Mortality Weekly Report

Weekly / Vol. 69 / No. 50

December 18, 2020

Tobacco Product Use Among Middle and High School Students — United States, 2020

Andrea S. Gentzke, PhD[1]; Teresa W. Wang, PhD[1]; Ahmed Jamal, MBBS[1]; Eunice Park-Lee, PhD[2]; Chunfeng Ren, PhD[2]; Karen A. Cullen, PhD[2]; Linda Neff, PhD[1]

Tobacco use is the leading cause of preventable disease and death in the United States; nearly all tobacco product use begins during youth and young adulthood (*1*,*2*). CDC and the Food and Drug Administration (FDA) analyzed data from the 2019 and 2020 National Youth Tobacco Surveys (NYTS) to determine changes in the current (past 30-day) use of seven tobacco products among U.S. middle (grades 6–8) and high (grades 9–12) school students. In 2020, current use of any tobacco product was reported by 16.2% (4.47 million) of all students, including 23.6% (3.65 million) of high school and 6.7% (800,000) of middle school students. Electronic cigarettes (e-cigarettes) were the most commonly used tobacco product among high school (19.6%; 3.02 million) and middle school (4.7%; 550,000) students. From 2019 to 2020, decreases in current use of any tobacco product, any combustible tobacco product, multiple tobacco products, e-cigarettes, cigars, and smokeless tobacco occurred among high school and middle school students; these declines resulted in an estimated 1.73 million fewer current youth tobacco product users in 2020 than in 2019 (6.20 million) (*3*). From 2019 to 2020, no significant change occurred in the use of cigarettes, hookahs, pipe tobacco, or heated tobacco products. The comprehensive and sustained implementation of evidence-based tobacco control strategies at the national, state, and local levels, combined with tobacco product regulation by FDA, is warranted to help sustain this progress and to prevent and reduce all forms of tobacco product use among U.S. youths (*1*,*2*).

NYTS is a cross-sectional, voluntary, school-based, self-administered electronic survey of U.S. middle and high school students. A stratified three-stage cluster sampling procedure generated a nationally representative sample of U.S. students attending public and private schools in grades 6–12. Participants complete the survey in classrooms using a tablet computer.* In

INSIDE

Youth Tobacco Use: I … e: Results from the National Youth To… and-tobacco/youth-tobacc…

IN SEPTEMBER: 2020

In Sept. 2020, CDC released findings that 1.8 million fewer U.S. youth are currently using e-cigarettes compared to 2019.

However

3.6 M

U.S. youth still currently using e-cigs

There is a notable uptick in use of

DISPOSABLE

E-cigs by youth

More than

8 out of **10**

Current youth e-cig users use flavored e-cigs

Source: National Youth Tobacco Survey

IN SEPTEMBER: 2020 NYTS

20% of high school students and 5% of middle school students were current users of e-cigarettes in early 2020, compared with 27.5% of high school students and 10.5% of middle school students in 2019.

Data collected between January 16 and March 16, 2020 suggest that substantial declines in e-cigarette use may have occurred even prior to and in some cases before stay-at-home orders.

Source: Gaiha SM, Lempert LK, Halpern-Felsher B. Underage youth and young adult e-cigarette use and access before and during the coronavirus disease 2019 pandemic.JAMA Netw Open. 2020;3(12):e2027572. doi:10.1001/ jamanetworkopen.2020.2757

DECLINE: REASONS GIVEN

At h … ken

PAR … **S**

Woul …

JAMA Network | Open.

Original Investigation | Public Health

Underage Youth and Young Adult e-Cigarette Use and Access Before and During the Coronavirus Disease 2019 Pandemic

Shivani Mathur Gaiha, PhD; Lauren Kass Lempert, JD, MPH; Bonnie Halpern-Felsher, PhD

Abstract

IMPORTANCE Understanding patterns of e-cigarette use and access during the coronavirus disease 2019 (COVID-19) pandemic is important because e-cigarettes may put users at risk for more severe respiratory effects and other health problems.

OBJECTIVE To examine whether underage youth and young adults who ever used e-cigarettes self-reported changes in access and use of e-cigarettes since the COVID-19 pandemic began.

DESIGN, SETTING, AND PARTICIPANTS A national, cross-sectional online survey study was conducted from May 6 to May 14, 2020. This sample of 4351 participants aged 13 to 24 years across the US included 2167 e-cigarette ever-users. Quota sampling was used to balance for age, sex, race/ethnicity, and 50% having ever used e-cigarettes.

MAIN OUTCOMES AND MEASURES Change in e-cigarette use (increase, decrease, quit, no change, and switch to another product) and access to e-cigarettes (easier or harder, and change in point-of-purchase) before and after the COVID-19 pandemic began, reasons for change, number of times e-cigarettes were used, nicotine dependence, and sociodemographic data.

RESULTS This study focused on 2167 e-cigarette ever-users among 4351 participants who completed the survey. Among 2167 e-cigarette users, a total of 1442 were younger than 21 years and 725 were aged 21 years or older; 1397 were female (64.5%) and 438 identified as lesbian, gay, bisexual, transgender, queer (20.2%). The survey completion rate was 40%. Since the COVID-19 pandemic began, 1198 of 2125 e-cigarette users (56.4%) changed their use: 388 individuals (32.4%) quit, 422 individuals (35.3%) reduced the amount of nicotine, 211 individuals (17.6%) increased nicotine use, 94 individuals (7.8%) increased cannabis use, and 82 individuals (6.9%) switched to other products. Participants reported that not being able to go to vape shops and product unavailability were the reasons accessing e-cigarettes was difficult after the pandemic began. Since

Key Points

Question Did underage youth and young adults (13-24 years) self-report changes in use and access to e-cigarettes during the coronavirus disease 2019 pandemic?

Findings In this national, online, cross-sectional survey study of 2167 youth and young adults using e-cigarettes, 1198 respondents reported changing their amount of e-cigarette use, with 810 reducing or quitting e-cigarette use; e-cigarette access shifted to alternative retail stores and online. Reduced e-cigarette use or quitting was associated with adhering to shelter-in-place guidelines and was less likely if participants had used e-cigarettes more than 10 times or were nicotine dependent.

Meaning Individuals younger than 21 years reported e-cigarette use and accessed e-cigarettes from online and retail stores during the coronavirus disease 2019 pandemic, suggesting a need to strengthen prevention of e-cigarette sales to such youth,

Source: … **rette use and** … **pen.**

USE DURING COVID: EASIER & HARDER

Characteristi	g Adults
Reasons Why i	
I can not go to	28
Longer shippin	27
I can not go to	16
My product is r	15
Its more expen	10
Restriction on	6
Reasons why i	
Vape shop dea	52
Vape shop dea	29
I switched to b	30
It is cheaper th	16
I use my paren	8

Addictive Behaviors 105 (2020) 106345

Contents lists available at ScienceDirect

Addictive Behaviors

journal homepage: www.elsevier.com/locate/addictbeh

How are adolescents getting their vaping products? Findings from the international tobacco control (ITC) youth tobacco and vaping survey

David Braak[a], K. Michael Cummings[b,*], Georges J. Nahhas[c], Jessica L. Reid[d], David Hammond[d]

[a] Medical University of South Carolina, Charleston, SC, United States
[b] Department of Psychiatry and Behavioral Sciences, Medical University of South Carolina, Charleston, SC, United States
[c] Department of Psychiatry and Behavioral Sciences, Hollings Cancer Center, Medical University of South Carolina, Charleston, SC, United States
[d] School of Public Health & Health Systems, University of Waterloo, Waterloo, ON, Canada

HIGHLIGHTS

- We report sources of vaping products reported from a 2017 web-based survey of 12,128 adolescents.
- 7.5% of adolescents had purchased a vaping product in the past year.
- Vape shops were the mostly commonly reported location for buying a vaping product.
- Purchasing was more common by those who vape more frequently and by those of legal age.
- A regulatory balance is needed to restrict access to nonsmokers while allowing access to smokers.

ARTICLE INFO

Keywords:
Vaping-products
Youth
Purchase
Policy

ABSTRACT

Objective: To examine the sources of vaping products reported by adolescents, and the characteristics of adolescents who reported purchasing a vaping product in the past year in the United States (US), Canada (CA), and England (EN).

Methods: Data were from the 2017 ITC Youth Tobacco and Vaping Survey, a web-based survey of 12,128 respondents aged 16–19 years recruited from commercial panels in the US, CA, and EN. Respondents who have vaped in the past 12 months were asked whether they had purchased a vaping product, and from where (vape shop, online, retail), as well as whether anyone refused to sell them a vaping product because of their age. Respondents who reported vaping in the past 30 days were asked where they had obtained their vaping product from a social and/or commercial source.

Results: Only about 7.5% of respondents reported having purchased a vaping product in the past year. Among

Source: Miech, ton-Trimis, J. (2021). Trends ir 2020. JAMA

DECLINE: REASONS GIVEN

At home
PARENTS
Would know

Can't get
PRODUCTS

E-cigs weaken
LUNGS

Poll: which of these suggest possible prevention approaches to strengthen?

PERCEIVED RISK OF HARM

Percent

Research

JAMA Pediatrics | Original Investigation

Trends in Use and Perceptions of Nicotine Vaping Among US Youth From 2017 to 2020

Richard Miech, PhD; Adam Leventhal, PhD; Lloyd Johnston, PhD; Patrick M. O'Malley, PhD; Megan E. Patrick, PhD; Jessica Barrington-Trimis, PhD

Supplemental content

IMPORTANCE US adolescent nicotine vaping increased at a record pace from 2017 to 2019, prompting new national policies to reduce access to flavors of vaping products preferred by youth.

OBJECTIVE To estimate prevalence, perceived harm, and accessibility of nicotine vaping products among US adolescents from 2017 to 2020.

DESIGN, SETTING, AND PARTICIPANTS This survey study includes data from Monitoring the Future, which conducted annual, cross-sectional, school-based, nationally representative surveys from 2017 to 2020 of 10th- and 12th-grade students (results pooled grades, n = 94 320) about vaping and other topics.

MAIN OUTCOMES AND MEASURES Prevalence of self-reported nicotine vaping; vaping brand and flavor used most often; perceived risk of nicotine vaping; and perceived ease of getting vaping devices, nicotine solutions for vaping, and flavored solutions.

RESULTS In 2020, Monitoring the Future surveyed 8660 students in 10th and 12th grade, of whom 50.6% (95% CI, 47%-54%) were female, 13% (95% CI, 8%-21%) were non-Hispanic Black, 29% (95% CI, 21%-40%) were Hispanic, and 53% (95% CI, 42%-63%) were non-Hispanic White. Nicotine vaping prevalence in 2020 was 22% (95% CI, 19%-25%) for past 30-day use, 32% (95% CI, 28%-37%) for past 12-month use, and 41% (95% CI, 37%-46%) for lifetime use; these levels did not significantly change from 2019. Daily nicotine vaping (use on ≥20 days of the last 30 days) significantly declined from 9% (95% CI, 8%-10%) to 7% (95% CI, 6%-9%) over 2019 to 2020. JUUL brand prevalence in the past 30 days decreased from 20% (95% CI, 18%-22%) in 2019 to 13% (95% CI, 11%-15%) in 2020, while use of other brands increased. Among youth who vaped in the past 30 days in 2020, the most often used flavor was fruit at 59% (95% CI, 55%-63%), followed by mint at 27%

EMPHASIZE RISKS: COMMUNITY

Access through your institution | Purchase PDF

ELSEVIER

Journal of Adolescence
Volume 76, October 2019, Pages 202-209

Review article

On the potential harmful effects of E-Cigarettes (EC) on the developing brain: The relationship between vaping-induced oxidative stress and adolescent/young adults social maladjustment.

Tobore Onojighofia Tobore MD, MPH ✉

Show more

+ Add to Mendeley Share Cite

E- c N Al

se users other RMFUL MICALS

WHO CONTINUED: FREQUENT USERS

Youth with more frequent e-cigarette use and higher nicotine dependence were more likely to continue vaping during the COVID-19 pandemic.

This suggests that we continue developing and implementing strategies for addressing youth vaping addiction, including programs using novel approaches, such as social media, virtual reality, and text message programs.

WI RS

use
e
the

ies
n,

irtual

Research

JAMA Internal Medicine | Original Investigation

Effectiveness of a Vaping Cessation Text Message Program Among Young Adult e-Cigarette Users
A Randomized Clinical Trial

Amanda L. Graham, PhD; Michael S. Amato, PhD; Sarah Cha, MSPH; Megan A. Jacobs, MPH; Mia M. Bottcher; George D. Papandonatos, PhD

IMPORTANCE e-Cigarettes are the most commonly used tobacco product among young adults (YAs). Despite the harms of nicotine exposure among YAs, there are few, if any, empirically tested vaping cessation interventions available.

OBJECTIVE To determine the effectiveness of a text message program for vaping cessation among YAs vs assessment-only control.

DESIGN, SETTING, AND PARTICIPANTS A parallel, 2-group, double-blind, individually randomized clinical trial was conducted from December 2019 to November 2020 among YA e-cigarette users. Eligible individuals were US residents aged 18 to 24 years who owned a mobile phone with an active text message plan, reported past 30-day e-cigarette use, and were interested in quitting in the next 30 days. Participants were recruited via social media ads, the intervention was delivered via text message, and assessments were completed via website or mobile phone. Follow-up was conducted at 1 and 7 months postrandomization; follow-up data collection began January 2020 and ended in November 2020. The study was prespecified in the trial protocol.

INTERVENTIONS All participants received monthly assessments via text message about e-cigarette use. The assessment-only control arm (n = 1284) received no additional intervention. The active intervention arm (n = 1304) also received This is Quitting, a fully automated text message program for vaping cessation that delivers social support and cognitive and behavioral coping skills training.

MAIN OUTCOMES AND MEASURES The primary outcome was self-reported 30-day point prevalence abstinence (ppa) at 7 months analyzed under intention-to-treat analysis, which counted nonresponders as vaping. Secondary outcomes were 7-day ppa under intention-to-treat analysis and retention weighted complete case analysis of 30-day and 7-day ppa.

RESULTS Of the 2588 YA e-cigarette users included in the trial, the mean (SD) age was 20.4 (1.7) years, 1253 (48.4%) were male, 2159 (83.4%) were White, 275 (10.6%) were Hispanic, and 493 (19.0%) were a sexual minority. Most participants (n = 2129; 82.3%) vaped within 30 minutes of waking. The 7-month follow-up rate was 76.0% (n = 1967), with no differential attrition. Abstinence rates were 24.1% (95% CI, 21.8%-26.5%) among intervention participants and 18.6% (95% CI, 16.7%-20.8%) among control participants (odds ratio, 1.39; 95% CI, 1.15-1.68; $P < .001$). No baseline variables moderated the treatment-outcome relationship, including nicotine dependence.

CONCLUSIONS AND RELEVANCE Results of this randomized clinical trial demonstrated that a tailored and interactive text message intervention was effective in promoting vaping cessation among YAs. These results establish a benchmark of intervention effectiveness.

Visual Abstract
Invited Commentary
Supplemental content

Author Affiliations: Innovations Center, Truth Initiative, Washington, DC (Graham, Amato, Cha, Jacobs, Bottcher); Department of Medicine, Mayo Clinic College of Medicine and Science, Rochester, Minnesota (Graham, Amato); Department of Oncology, Georgetown University

VARIETY OF E-CIGARETTE DEVICES

The Evolution of E-Cigarette, or Vaping, Products

1st GENERATION

Disposable e-cigarettes

2nd GENERATION

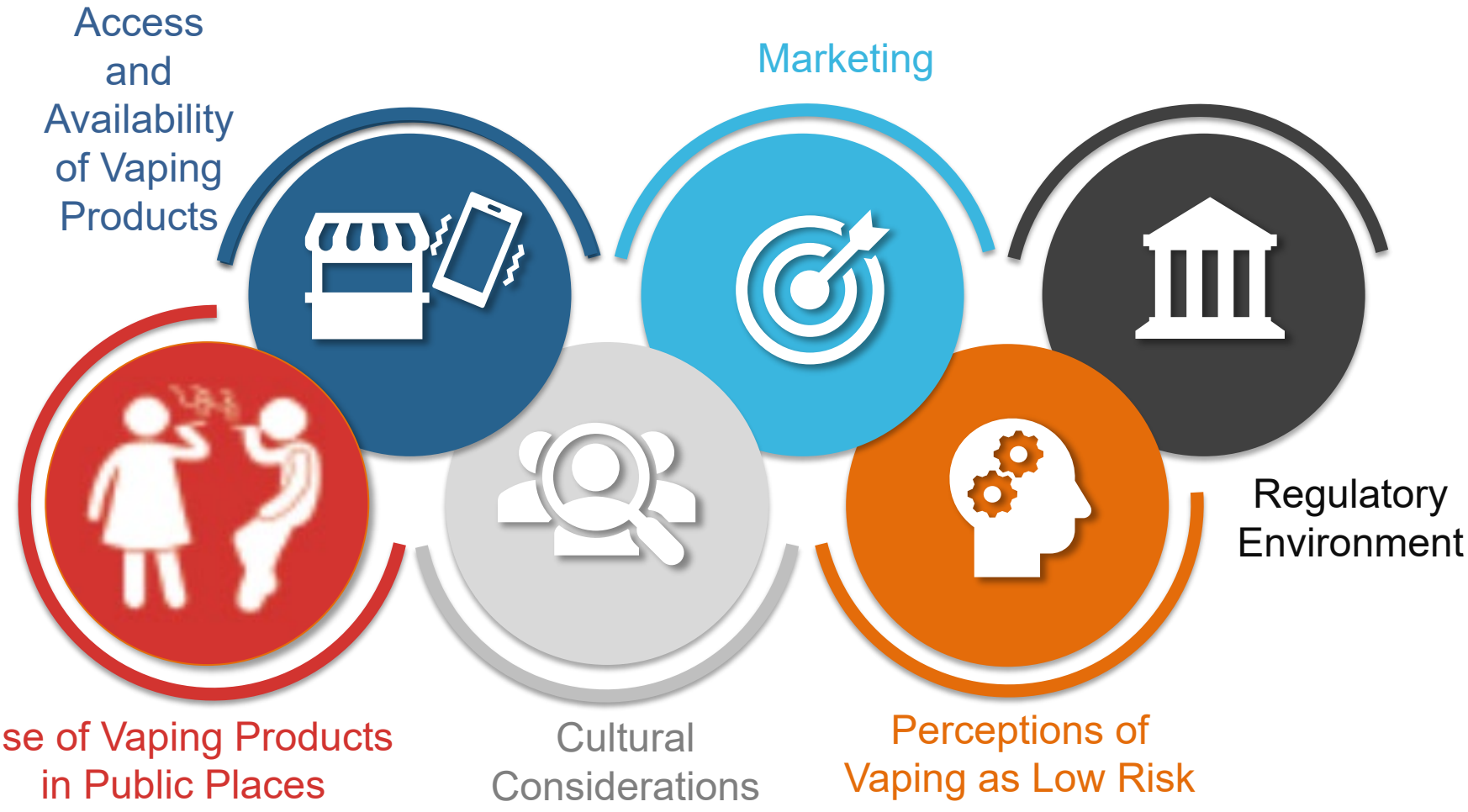
E-cigarette with prefilled or refillable cartridge

Substance Abuse and Mental Health Services Administration (SAMHSA): *Reducing Vaping Among Youth and Young Adults*. SAMHSA Publication No. PEP20-06-01-003. Rockville, MD: National Mental Health and Substance Use Policy Laboratory, Substance Abuse and Mental Health Services Administration, 2020.

Evidence Based Strategies

Reducing Vaping Among Youth and Young Adults

CHALLENGES TO PREVENTION



Substance Abuse and Mental Health Services Administration (SAMHSA): *Reducing Vaping Among Youth and Young Adults*. SAMHSA Publication No. PEP20-06-01-003. Rockville, MD: National Mental Health and Substance Use Policy Laboratory, Substance Abuse and Mental Health Services Administration, 2020.

INTERVENTIONS SHOULD BE IMPLEMENTED AT MULTIPLE LEVELS

Substance Abuse and Mental Health Services Administration (SAMHSA): *Reducing Vaping Among Youth and Young Adults*. SAMHSA Publication No. PEP20-06-01-003. Rockville, MD: National Mental Health and Substance Use Policy Laboratory, Substance Abuse and Mental Health Services Administration, 2020.

MANAGING RETAILER DENSITY

Limit **number of** licenses by geographic area

Require **minimum distance** between stores

Limit retailers **relative to population** size

Restrict retailers **near schools** or playgrounds

Substance Abuse and Mental Health Services Administration (SAMHSA): *Reducing Vaping Among Youth and Young Adults*. SAMHSA Publication No. PEP20-06-01-003. Rockville, MD: National Mental Health and Substance Use Policy Laboratory, Substance Abuse and Mental Health Services Administration, 2020.

REGULATORY TOOLS

USED BY STATES AND JURISDICTIONS

LICENSING

Licenses a serve to regulate afford rights to business. This can be used to **limit the number** of vaping retailers

ZONING

Zones are legal guides for where business can exist. This guides **where vaping retailers can sell** products

Substance Abuse and Mental Health Services Administration (SAMHSA): *Reducing Vaping Among Youth and Young Adults*. SAMHSA Publication No. PEP20-06-01-003. Rockville, MD: National Mental Health and Substance Use Policy Laboratory, Substance Abuse and Mental Health Services Administration, 2020.

STATE BY STATE POLICY

https://www.publichealthlawcenter.org/resources/us-e-cigarette-regulations-50-state-review

Comprehensive Planning

Research shows that implementing new programs or policies requires a comprehensive, multi-pronged approach.

EXAMPLES OF STATE, COUNTY AND LOCAL SOLUTIONS

EXAMPLES OF STATE, COUNTY AND LOCAL SOLUTIONS

Type in the Chat: Which Segment could You be doing More With?

Questions

Chuck Klevgaard
Cklevgaard@edc.org

ADDITIONAL RESOURCES

ATTC AND PTTC NETWORKS

Central East ATTC:

- Vaping and LGBTQ Youth
- Marijuana & Vaping - The Triangulum: The Future is Now

Great Lakes PTTC:

- Vaping: Health Effects And Catch My Breath Program
- Vaping Part 2: Education vs. Punishment Using Deferred Citation

Mountain Plains PTTC:

- V-TECH Meet the Experts: Emerging Issues Around Vaping
- Informing Prevention (Adolescents): Vaping Among Adolescents - What We Know and What We Don't

Mid-America PTTC:

- E-Cigarettes and Vaping

National PTTC:

- Webinar: Research, Policies, and Practices: Federal and Community-level Perspectives on Vaping
- Highlighted PTTC Resources Addressing Vaping and Tobacco Use Prevention

National Hispanic & Latino PTTC:

- Webinar: Vaping 101: and Latino Youth: Devices, risks, prevention efforts, and solutions

Northwest PTTC:

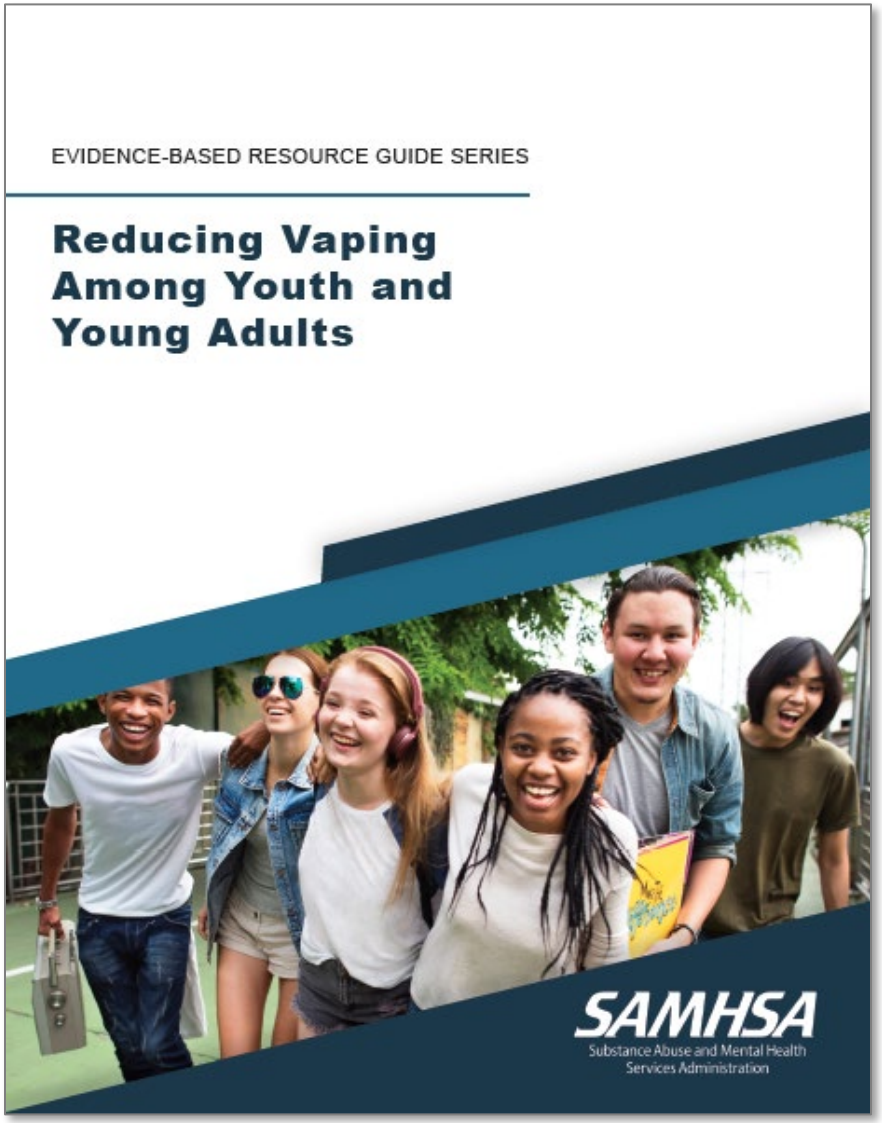
- The Vaping Epidemic: Troubling Trends and Their Implications for Youth Cannabis Use Prevention and Policy - A Call to Action!
- Webinar: E-Cigarettes and Vaping: The Mechanics of Use, Risks to Youth, and Prevention Efforts

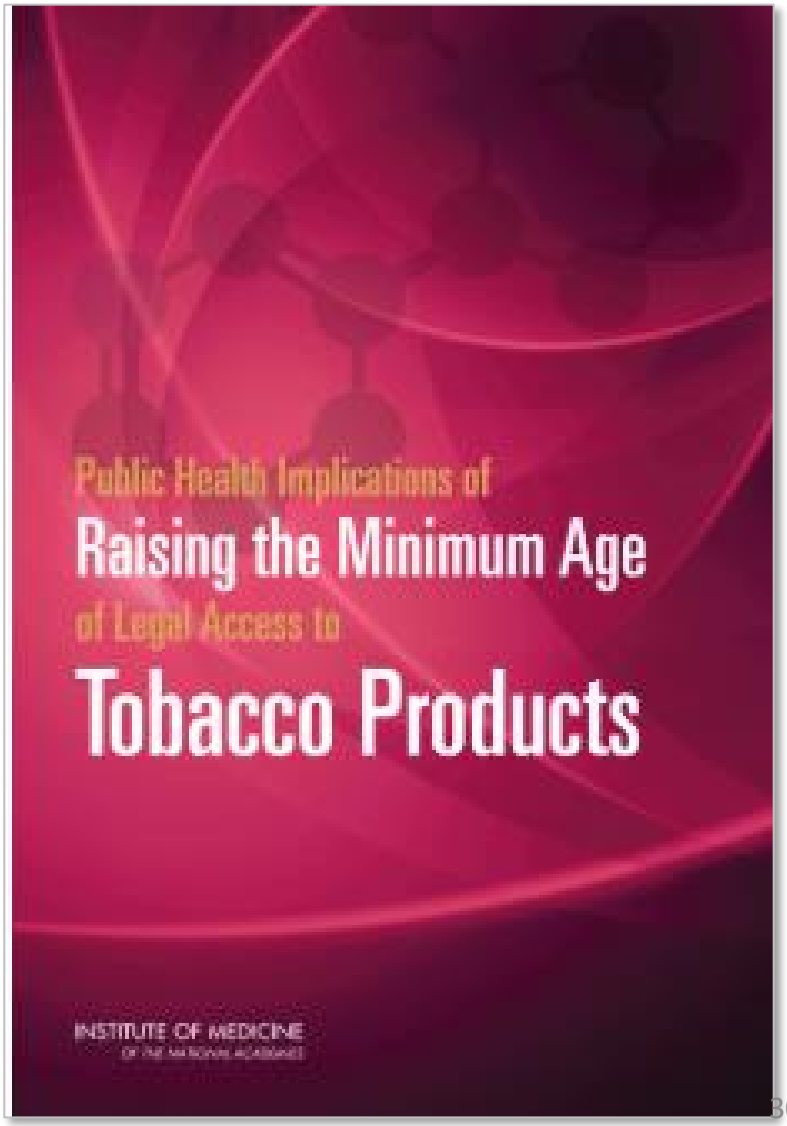
Pacific Southwest PTTC:

- Webinar Resources and References: E-Cigarettes and Vaping: A Public Health Epidemic

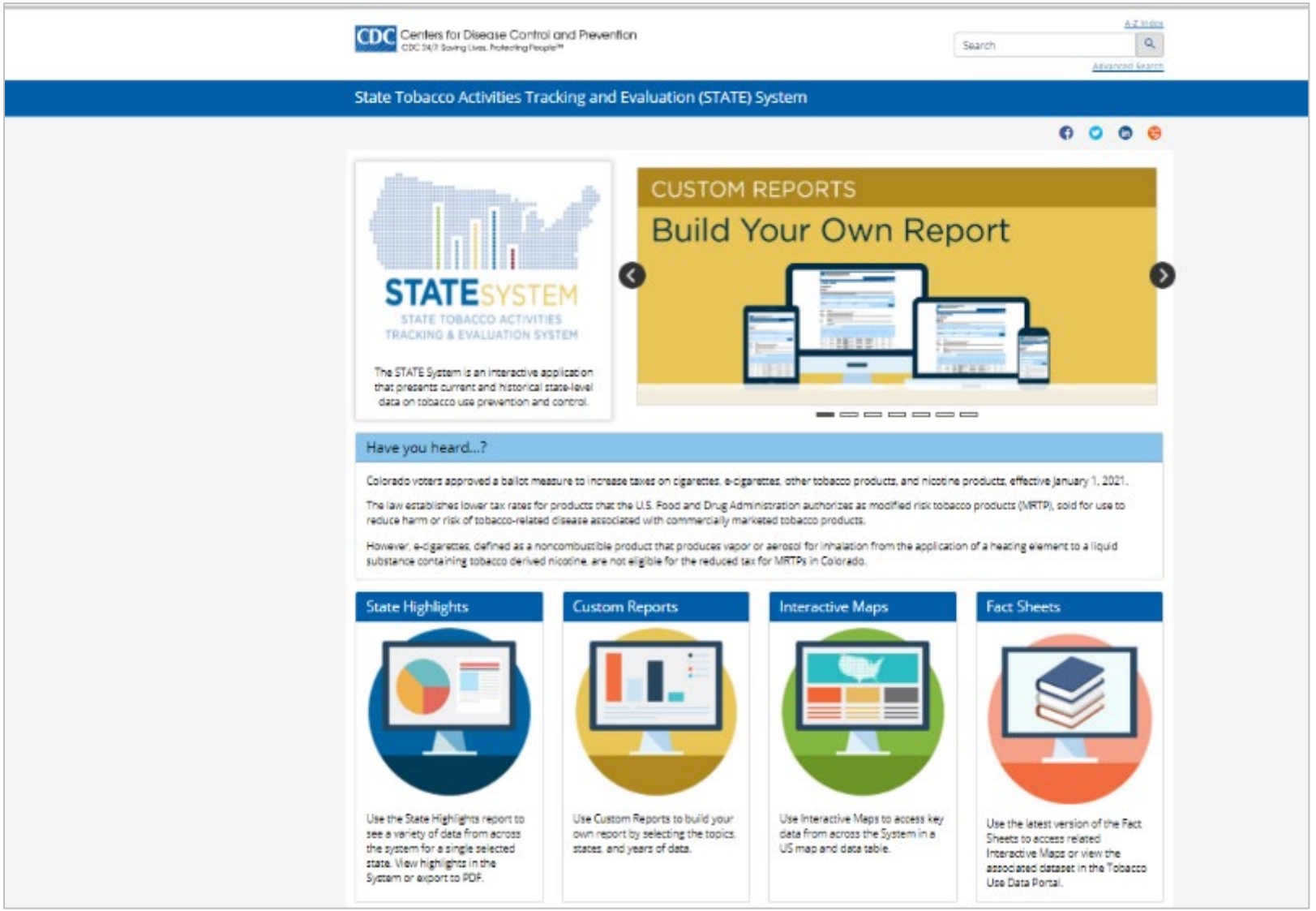
Great Lakes PTTC https://pttcnetwork.org/centers/great-lakes-pttc/news/vaping-resources-and-information
PTTC Network: https://pttcnetwork.org/centers/global-pttc/vaping-resources

STRATEGIES


EVIDENCE-BASED RESOURCE GUIDE SERIES
Reducing Vaping Among Youth and Young Adults
SAMHSA
Substance Abuse and Mental Health Services Administration

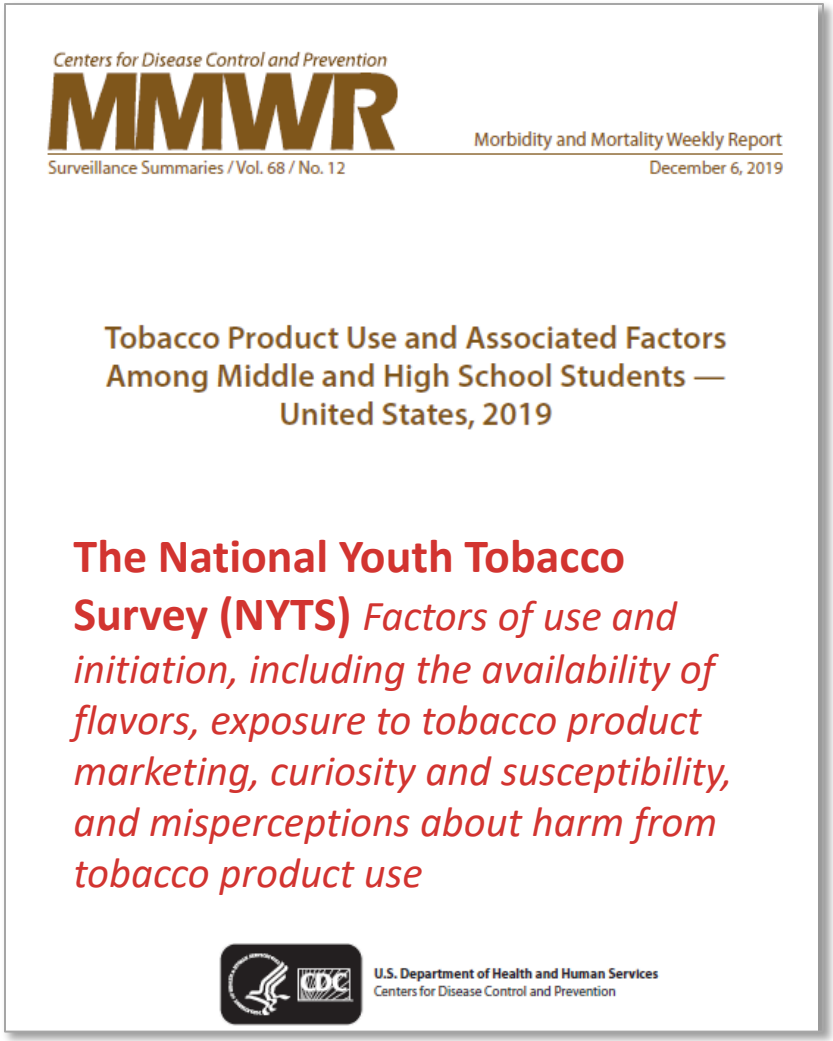

Public Health Implications of
Raising the Minimum Age
of Legal Access to
Tobacco Products
INSTITUTE OF MEDICINE

BUILD YOUR OWN PRESENTATION



State Tobacco Activities Tracking and Evaluation (STATE) System (cdc.gov)
https://www.cdc.gov/statesystem/index.html

DATA AND MOTIVATIONS



Centers for Disease Control and Prevention
MMWR
Morbidity and Mortality Weekly Report
Surveillance Summaries / Vol. 68 / No. 12
December 6, 2019

Tobacco Product Use and Associated Factors Among Middle and High School Students — United States, 2019

The National Youth Tobacco Survey (NYTS) *Factors of use and initiation, including the availability of flavors, exposure to tobacco product marketing, curiosity and susceptibility, and misperceptions about harm from tobacco product use*

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

Centers for Disease Control and Prevention
MMWR
Morbidity and Mortality Weekly Report
Early Release / Vol. 69
September 9, 2020

E-cigarette Use Among Middle and High School Students — United States, 2020

Teresa W. Wang, PhD[1]; Linda J. Neff, PhD[1]; Eunice Park-Lee, PhD[2]; Chunfeng Ren, PhD[2]; Karen A. Cullen, PhD[2]; Brian A. King, PhD[1]

The use of any tobacco product by youths is unsafe, including electronic cigarettes (e-cigarettes) (*1*). Most e-cigarettes contain nicotine, which is highly addictive, can harm the developing adolescent brain, and can increase risk for future addiction to other drugs (*1*). E-cigarette use has increased considerably among U.S. youths since 2011 (*1,2*). Multiple factors have contributed to this increase, including youth-appealing flavors and product innovations (*1–3*). Amid the widespread use of e-cigarettes and popularity of certain products among youths, on February 6, 2020, the Food and Drug Administration (FDA) implemented a policy prioritizing enforcement against the manufacture, distribution, and sale of certain unauthorized flavo… tobac… CI… from… a cr… vey … (grad… Marc… by t… 30-d…

CDC and FDA analyzed nationally representative data from the **2020 (NYTS).** *Decline viewed with caution. Devices, flavors, urging restrictions and bans on sales of flavored.*

and flavor** type. Weighted prevalence estimates and population totals†† were calculated. Analyses were conducted using SAS-callable SUDAAN (version 11.0.3; RTI International).

In 2020, 19.6% of high school students (3.02 million) and 4.7% of middle school students (550,000) reported current e-cigarette use. Among current e-cigarette users, 38.9% of high school students and 20.0% of middle school students reported using e-cigarettes on 20 or more of the past 30 days; 22.5% of high school users and 9.4% of middle school users reported daily use. Among all current e-cigarette users, 82.9% …school users …(400,000). …most com… …ges (48.5%; …790,000), …ool current …e type was …ollowed by …80,000). …ed any type …flavor types …39 million); …s, or other

*http… fda-f… ciga…

†https://www.cdc.gov/tobacco/data_statistics/surveys/nyts/index.htm.

§The data collection timeline was truncated because of widespread school closures during the coronavirus disease 2019 pandemic.

¶Device type use among current e-cigarette users was determined by answers to the question "Which of the following best describes the type of e-cigarette you have used in the past 30 days? If you have used more than one type, please think about the one you use most often." Response options were "a disposable e-cigarette," "an e-cigarette that uses pre-filled pods or cartridges (e.g., JUUL)," "an e-cigarette with a tank that you refill with liquids," "a mod system (an e-cigarette that can be customized by the user with their own combination of batteries or other parts)," and "I don't know the type."

…determined by answers to the question "Were any of the e-cigarettes that you used in the past 30 days flavored to taste like menthol, mint, clove or spice, alcohol (wine, cognac), candy, fruit, chocolate, or any other flavor?" Response options were "yes," "no," and "don't know." Flavor type use among current e-cigarette users who reported flavored e-cigarette use was determined by answers to the question "What flavors were the e-cigarettes that you have used in the past 30 days? (Select one or more)." Response options were: "menthol," "mint," "clove or spice," "fruit," "chocolate," "alcoholic drinks (such as wine, cognac, margarita, or other cocktails)," "candy, desserts, or other sweets," and "some other flavor not listed here" (write-in responses were not assessed).

††Weighted population estimates are rounded down to the nearest 10,000 students.

UPDATED FACTS AND INFOGRAPHICS

truth initiative
INSPIRING TOBACCO-FREE LIVES

ACTION NEEDED: E-CIGARETTES

Following years of successful tobacco control efforts that achieved record low youth smoking, **e-cigarettes have driven total youth tobacco use to rates unseen in decades**. Current, or past 30-day, use of e-cigarettes among high school students increased from 11.7% to 27.5% between 2017 and 2019, driving overall tobacco use among high school students to 31.2%.[1,2] The most recent data from 2020 show that **high school students continue to use e-cigarettes at epidemic levels**, with 1 in 5 (19.6%) vaping in the past 30 days, and that the **intensity of use has increased** with 38.9% of current users reporting vaping on 20 or more days per month.[2,3]

The Food and Drug Administration has taken only tentative steps to remove some youth-appealing products and flavors. In the absence of comprehensive federal regulation, many flavored e-cigarettes remain on the market and sales data indicate that young people simply switch to products that are still available. Meanwhile, evidence is mounting that links e-cigarette use among young people with subsequent cigarette use. A 2020 Truth Initiative study shows that **young Americans who had ever used e-cigarettes had seven times higher odds of becoming smokers one year later compared with those who had never vaped.**[4]

Despite the tobacco industry's insistence to regulators that e-cigarettes are intended for and marketed to adult smokers, the data show that youth and young adults continue to vape at the highest rates. While youth use of e-cigarettes reached 20.8% in 2018, the National Health Interview Survey found in the same year that only 3.2% of adults use e-cigarettes — much of that driven by young adults, who use at 7.6%.[5,6] A recent Truth Initiative study also found that **very few adult smokers are using e-cigarettes to try to quit**. Among adult smokers who tried to quit in the last year, just 1.1% used JUUL alone and only 5.6% used other e-cigarettes alone.[7] The study found that among former smokers who had quit in the past four years, just 2.2% reported using only JUUL and 6.9% used other e-cigarettes.[7] While some adults have used e-cigarettes to switch completely from combustible cigarettes, the **FDA has not approved any e-cigarette as a cessation intervention, and nearly half of adults who use e-cigarettes also use cigarettes**. This "dual use" provides no reduction in the harms associated with smoking.

Young Americans who had ever used e-cigarettes had seven times higher odds of becoming smokers one year later compared with those who had never vaped.

In an era when brand names of e-cigarettes have become verbs (e.g. "JUULing"), much work remains for federal, state and local governments to establish comprehensive policies to protect youth from highly addictive nicotine-containing products like e-cigarettes. Immediate action is needed, including **removing all non-tobacco flavors from the market**, ensuring a thorough and **transparent FDA review** of all products, and placing **restrictions on e-cigarette marketing**, among other regulatory measures that will help protect youth from a lifetime of nicotine addiction.

END