

# Technical Information

## ***SAMHSA***

Substance Abuse and Mental Health  
Services Administration

This training was developed under the Substance Abuse and Mental Health Services Administration's Prevention Technology Transfer Center task order. Reference # 1H79SP081018.

For training use only.

*Funding for this presentation was made possible by SAMHSA grant no. 1H79SP081018. The views expressed by speakers and moderators do not necessarily reflect the official policies of HHS; nor does mention of trade names, commercial practices, or organizations imply endorsement by the U.S. Government.*



Central East (HHS Region 3)

# PTTC

**LIVE**

This webinar is now live.



It is being recorded.



Please remain muted.

# Welcome

## Central East PTTC Webinar

# Preventing Youth Vaping, Cannabis, and Tobacco Use

## Part 1: Identifying and Understanding the Data

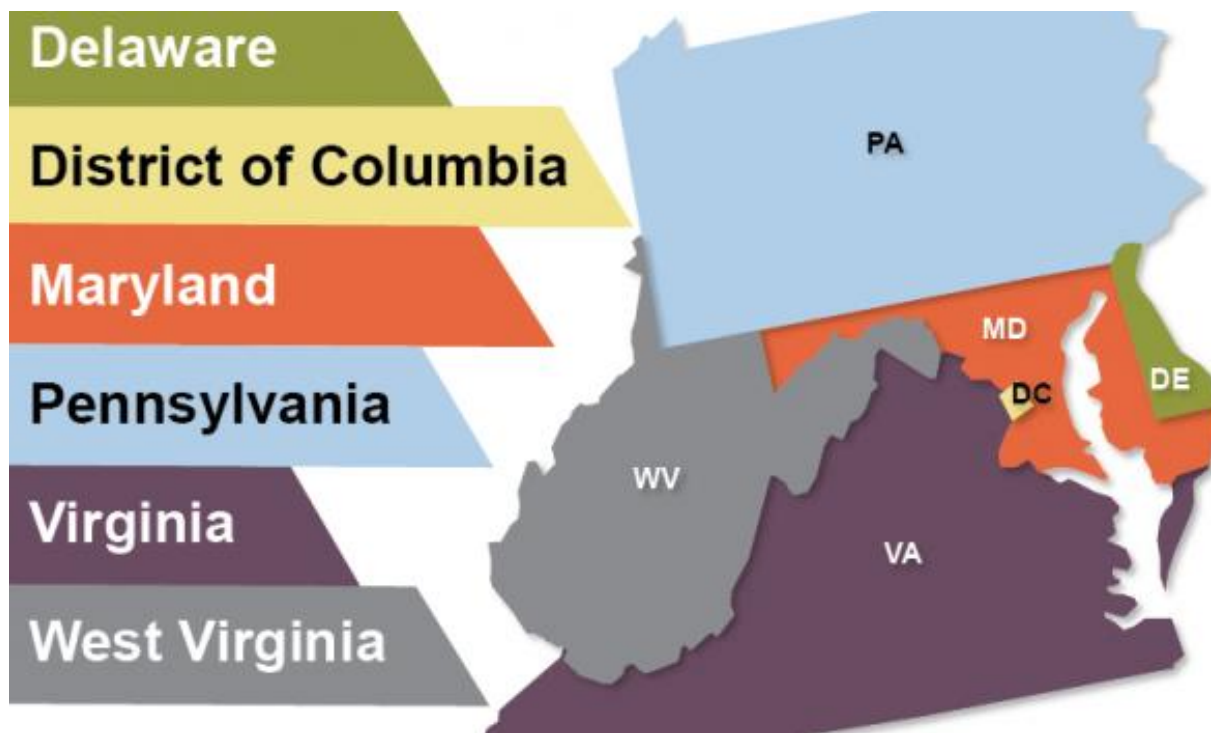
*The Central East PTTC is housed at the Danya Institute in Silver Spring, MD*

Oscar Morgan  
Executive Director

Deborah Nixon Hughes  
Project Director

# Central East Region

## SAMHSA REGION 3



Central East (HHS Region 3)

**PTTC**

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.

ethnicity spirituality  
orientation practices  
normalize experiences expression  
standard create  
Ethnic stories terror identity  
race share injustices  
change care Matter shootings  
Racial education  
space  
seem normal  
powerful  
NASW self Black  
gender affected Lives hate  
Diversity uncertainty  
sexual advocacy  
religious competency  
cultural  
humility



Central East (HHS Region 3)

PTTC

# PTTC Mission



To Strengthen the Capacity of the Workforce

1

To Deliver Evidence-Based Prevention Strategies

2

Facilitate Opportunities for Preventionists to Pursue New Collaboration Opportunities, which include Developing Prevention Partnerships and Alliances

3



Central East (HHS Region 3)

PTTC

# Services Available



Online Courses



Technical Assistance



Skill Based Training



Webinar



Toolkits



Facilitate Prevention Partnership & Alliances



Research Learning Collaborative



Newsletter



Technology Driven Models



Literature Searches



Virtual Meeting



Research Publication



Central East (HHS Region 3)

**PTTC**

# Other Resources in SAMHSA Region 3



Central East (HHS Region 3)

---

**ATTC**

Addiction Technology Transfer Center Network  
Funded by Substance Abuse and Mental Health Services Administration



Central East (HHS Region 3)

---

**MHTTC**

Mental Health Technology Transfer Center Network  
Funded by Substance Abuse and Mental Health Services Administration



Central East (HHS Region 3)

---

**PTTC**





Central East (HHS Region 3)

**PTTC**

Prevention Technology Transfer Center Network  
Funded by Substance Abuse and Mental Health Services Administration

# Preventing Youth Vaping, Cannabis, and Tobacco Use

## Part 1: Identifying and Understanding the Data

**Josh Esrick**

PTTC Prevention Specialist;  
Chief of TTA,  
Carnevale Associates

**Olivia Stuart**

Research Assistant,  
Carnevale Associates

**May 28, 2024**

**SAMHSA**  
Substance Abuse and Mental Health  
Services Administration

**THE DANYA INSTITUTE**

# Presenters



Josh Esrick



Olivia Stuart



Central East (HHS Region 3)

**PTTC**

# Mentimeter Activity



**How to  
participate:**

- Scan the QR code from a mobile device OR
- Click on the link in the chat OR
- Go to menti.com and enter the code at the top of this slide.

# Learning Objectives

- Describe youth substance use data sources and opportunities to expand data collection
- Explain the scope of youth vaping, cannabis, and tobacco use and consequences in the Central East region and nationally
- Identify risk and protective factors relevant to youth vaping, cannabis, and tobacco use
- Recognize the effects of the social determinants of health on youth vaping, cannabis, and tobacco use



# What Do We Mean by “Data”

- Data is any piece of information that can be used for some purpose (e.g., statistical analyses)
- Usually, data is collected to answer a question that you’re trying to find the answer to (e.g., numbers or demographics)
- Data can be classified in many ways and from different perspectives



Central East (HHS Region 3)

**PTTC**





# Which types of data have you been able to collect in the past?

0

Substance use rates

0

Demographics of people using substances

0

Availability of substances

0

Attitudes towards substance use

0

Other causes of substance use (write in chat)

0

Available community resources for prevention

0

Impact of prevention services

0

Other (write in chat)



## How to participate:

- Scan the QR code from a mobile device OR
- Click on the link in the chat OR
- Go to [menti.com](https://menti.com) and enter the code at the top of this slide.

# Examples of National Data Sources

- NSDUH (National Survey on Drug Use and Health)
- YRBS (Youth Risk Behavior Survey)
- Monitoring the Future (MTF)
- Nationwide Emergency Department Sample (NEDS)
- Wide-Ranging Online Data for Epidemiological Research (WONDER) (CDC)

And Many Others!



# Potential State Data Resources

- State Department of Education
- State Department of Health/Public Health
- State Police or State Courts
- State Liquor Licensing Agency
- State/Regional Poison Centers
- State Department of Motor Vehicles



Central East (HHS Region 3)

**PTTC**

# Potential Local Data Sources

- County/Municipal Health Departments
- Medical examiner/coroner
- Local hospitals, urgent care centers, health care providers
- Substance use treatment and recovery providers
- Community-based organizations
- Local law enforcement
- School districts
- Local colleges/universities
- Other stakeholders



# Keep in Mind: Different Sources May Provide Different Data!

Percentages of past-month nicotine vaping among youth:

	2020	2021	2022
<b>NSDUH (ages 12-17)</b>	5.1%	5.2%	6.9%
<b>MTF (grades 8-12)</b>	18.0%	13.3%	13.8%



Central East (HHS Region 3)

**PTTC**

# Collecting Your Own Data

- Collect your own data to the extent your capacity allows BUT understand the challenges to data collection
- Carefully analyze data and understand its strengths and weaknesses
- Use culturally competent research methods
- Consider other methods of data collection--especially when working with populations that have their own traditions for sharing information
- Native American examples:
  - Story Telling
  - Talking Circles
  - Visual Expressions



Central East (HHS Region 3)

PTTC

# Mentimeter Activity

Join at [menti.com](https://menti.com) | use code 7248 3210



SCAN ME

Content



Design



Settings



Help &  
Feedback

## What trends in youth vaping, cannabis, and tobacco use are you seeing in your community?

All responses to your question will be shown here

Each response can be up to 200 characters long

Turn on voting if interested and participants vote for the favorites



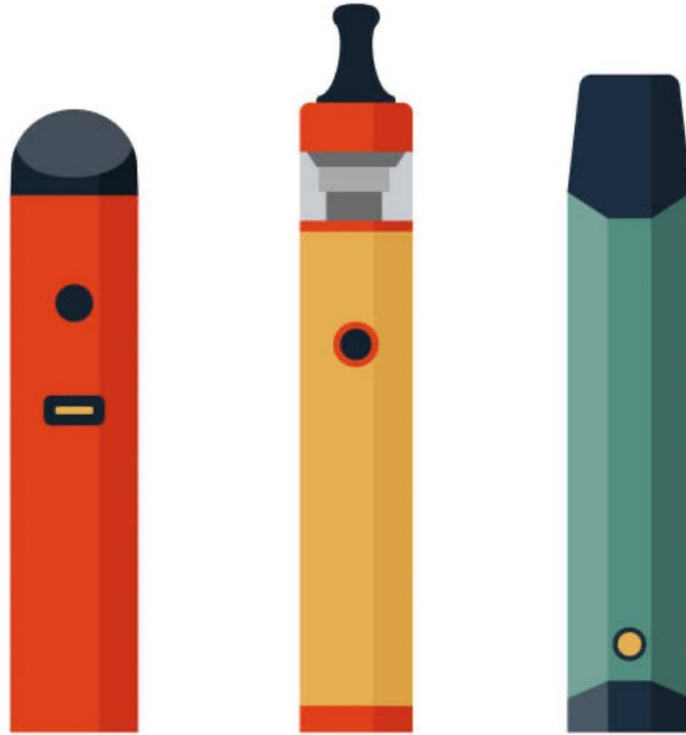
Central East (HHS Region 3)

# PTTC

**How to participate:**

- Scan the QR code from a mobile device OR
- Click on the link in the chat OR
- Go to [menti.com](https://menti.com) and enter the code at the top of this slide.

# Youth Vaping

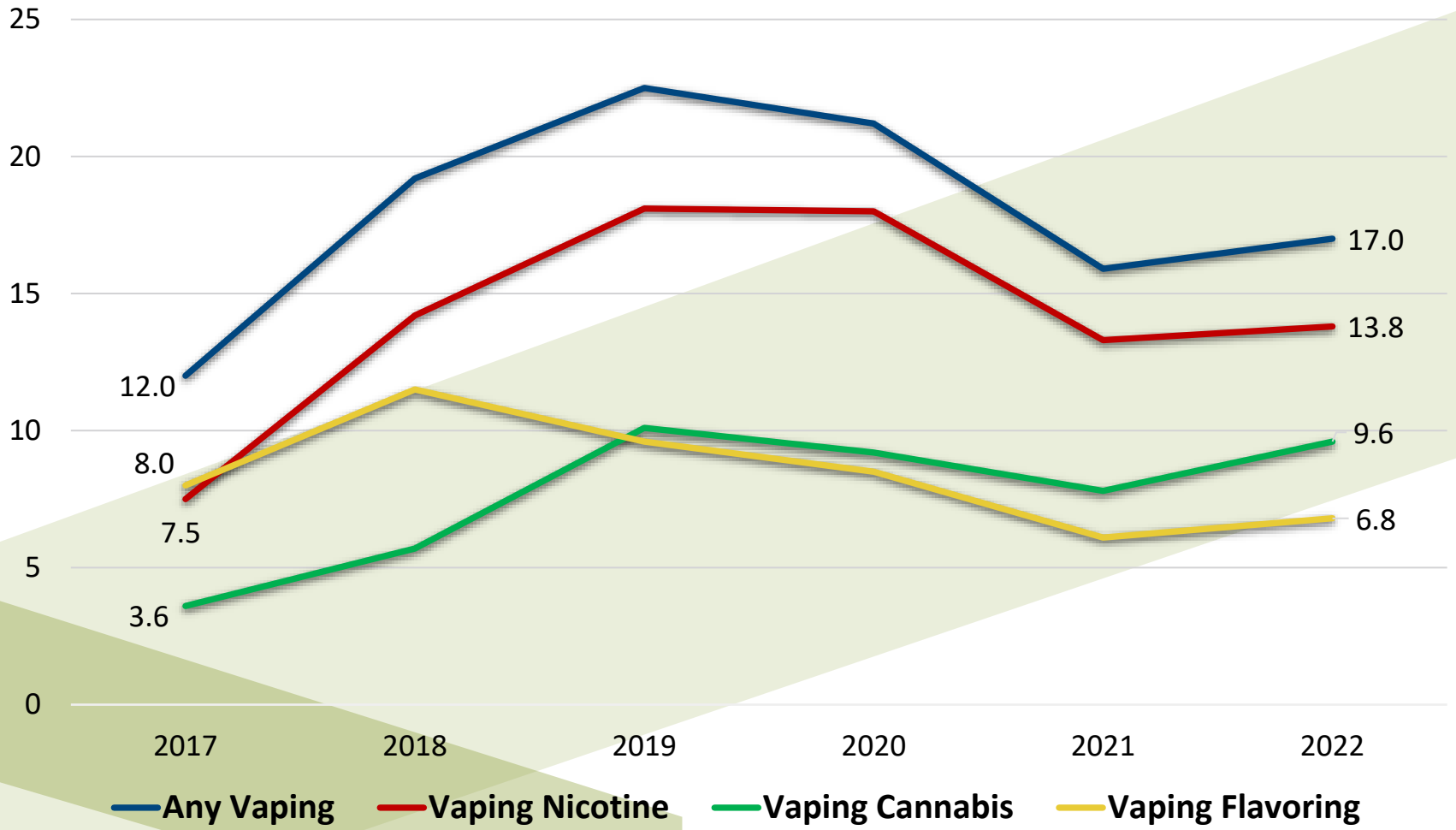


Central East (HHS Region 3)

**PTTC**

# Past-Month Vaping by Substance

Percentages among 9<sup>th</sup>-12<sup>th</sup> graders



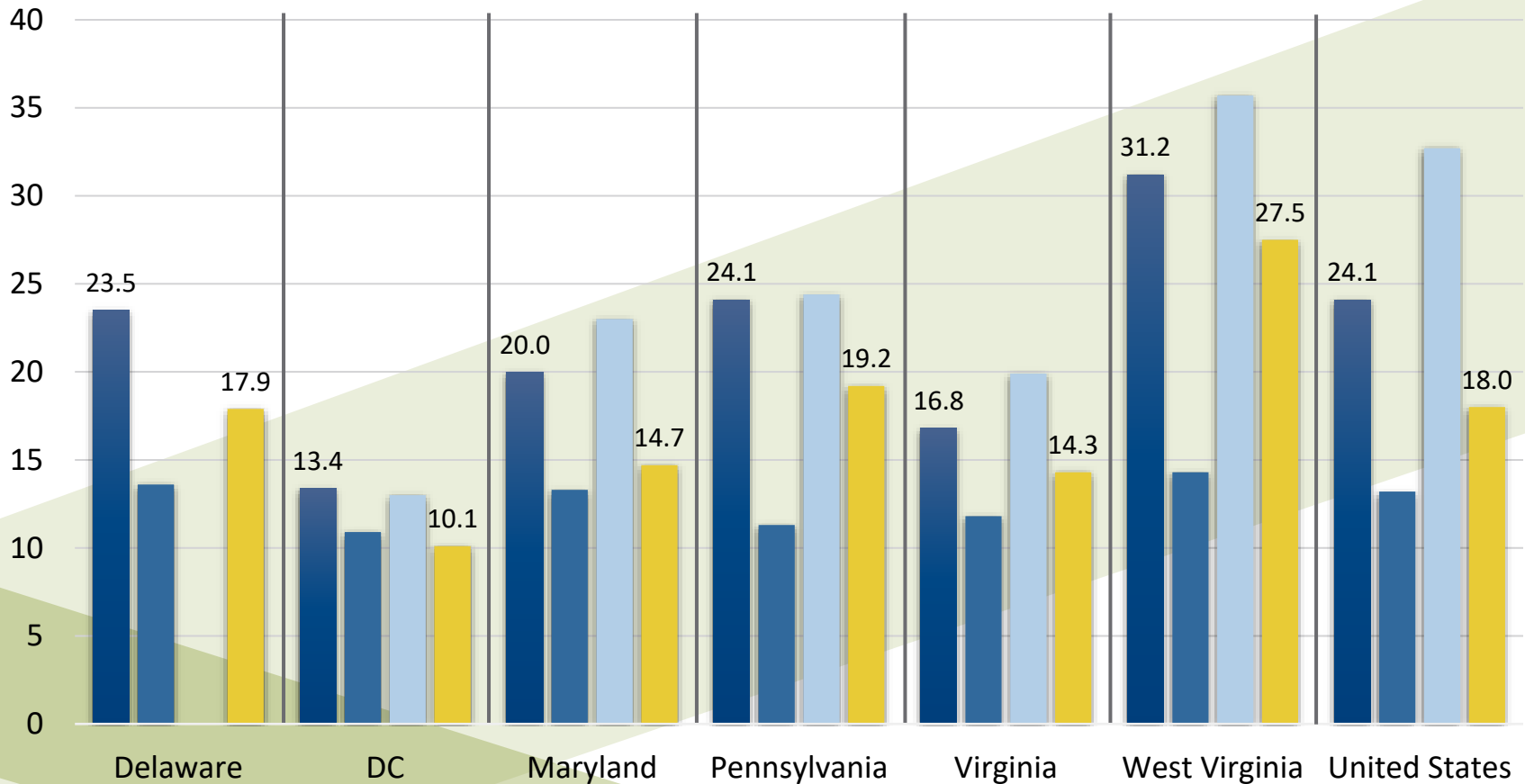
# Characteristics of Youth Who Vape

	Middle School	High School
<b>Frequency of Use in the Past 30 Days</b>		
1-5 days	62.0%	40.7%
6-9 days	17.3%	19.7%
20-30 days	20.7%	39.7%
Daily	11.4%	29.9%
<b>Type of Vaping Device Most Often Used</b>		
Disposable	47.9%	65.2%
Prefilled or Refillable Pods	16.7%	16.0%
Tanks or Mods	4.4%	6.0%
Don't Know	31.1%	12.8%



# Past-Month Vaping in the Central East Region

Percentages among 9<sup>th</sup>-12<sup>th</sup> graders



■ 2015 ■ 2017 ■ 2019 ■ 2021

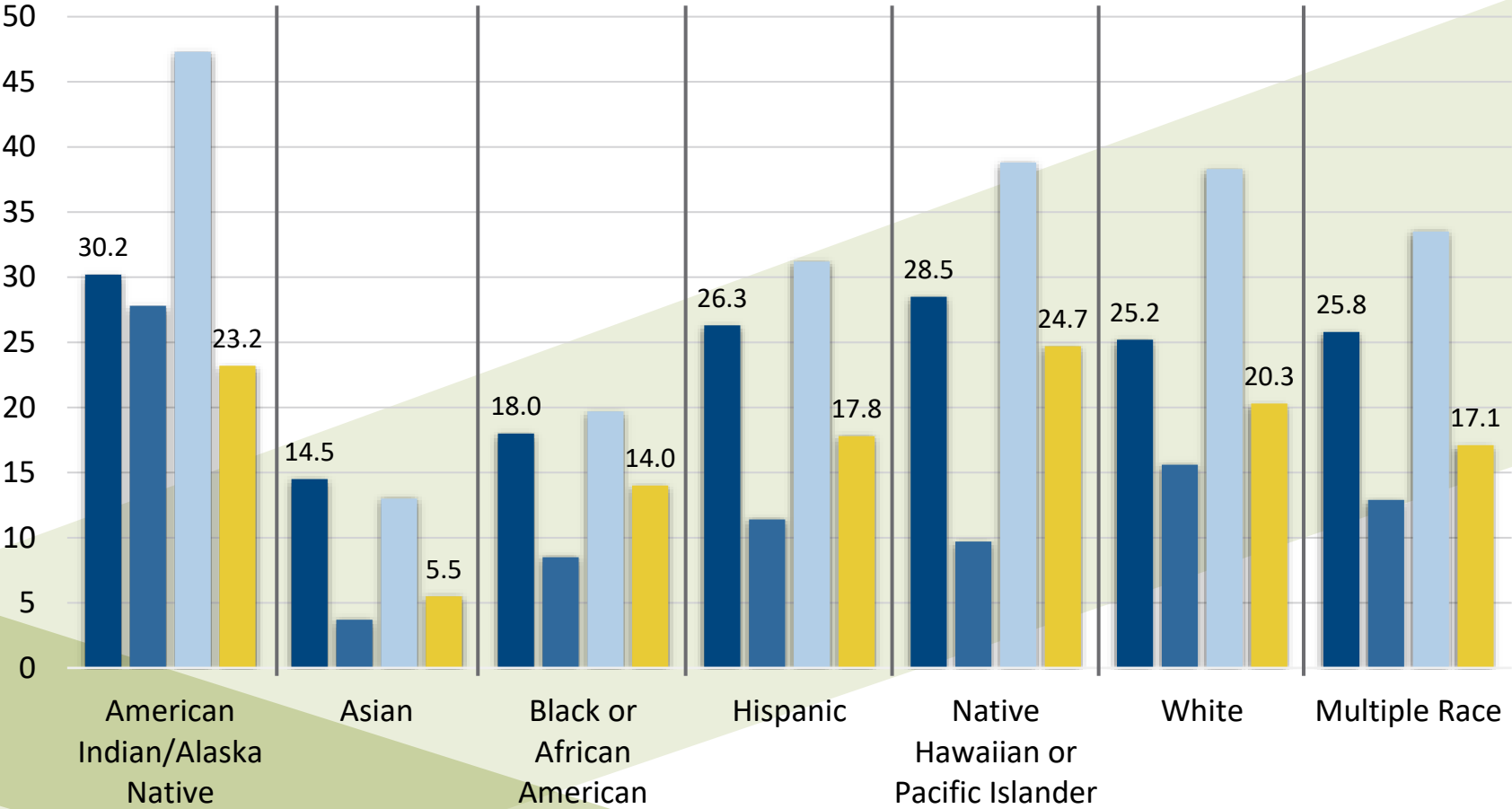


Central East (HHS Region 3)

**PTTC**

# Past-Month Vaping by Race/Ethnicity

Percentages among 9<sup>th</sup>-12<sup>th</sup> graders

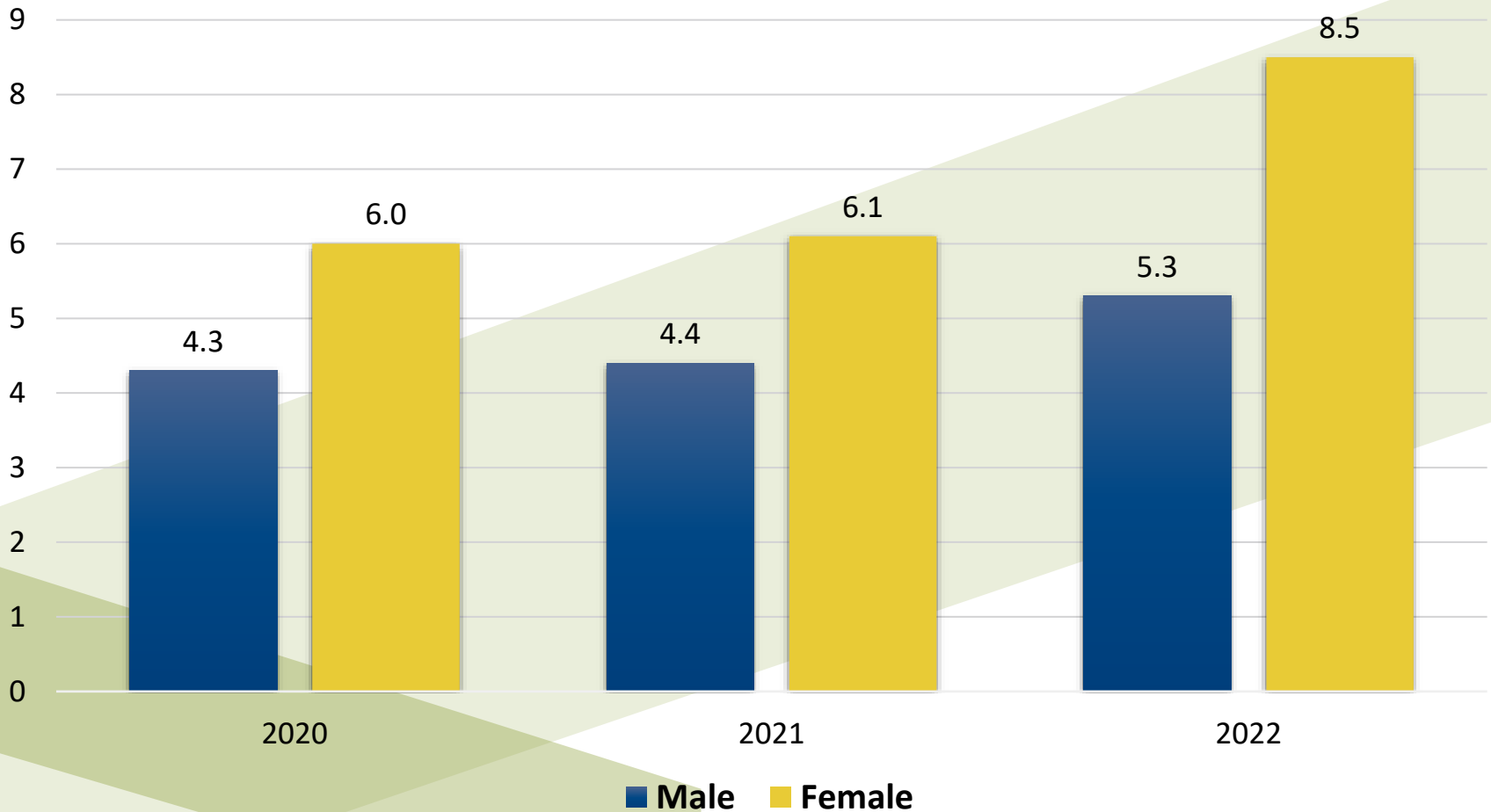


■ 2015 ■ 2017 ■ 2019 ■ 2021



# Past-Month Nicotine Vaping by Gender

Percentages among youth ages 12-17



Central East (HHS Region 3)

**PTTC**

# Potential Consequences of Vaping

- Nicotine or cannabis addiction
- Future use of other tobacco products
- Lung inflammation, cell damage, and cancer
- Mechanical product failure
- Potential exposure to heavy metal particles
- Risk of oral health damage
- Environmental hazards
- Unanticipated risks



# Youth Cannabis Use

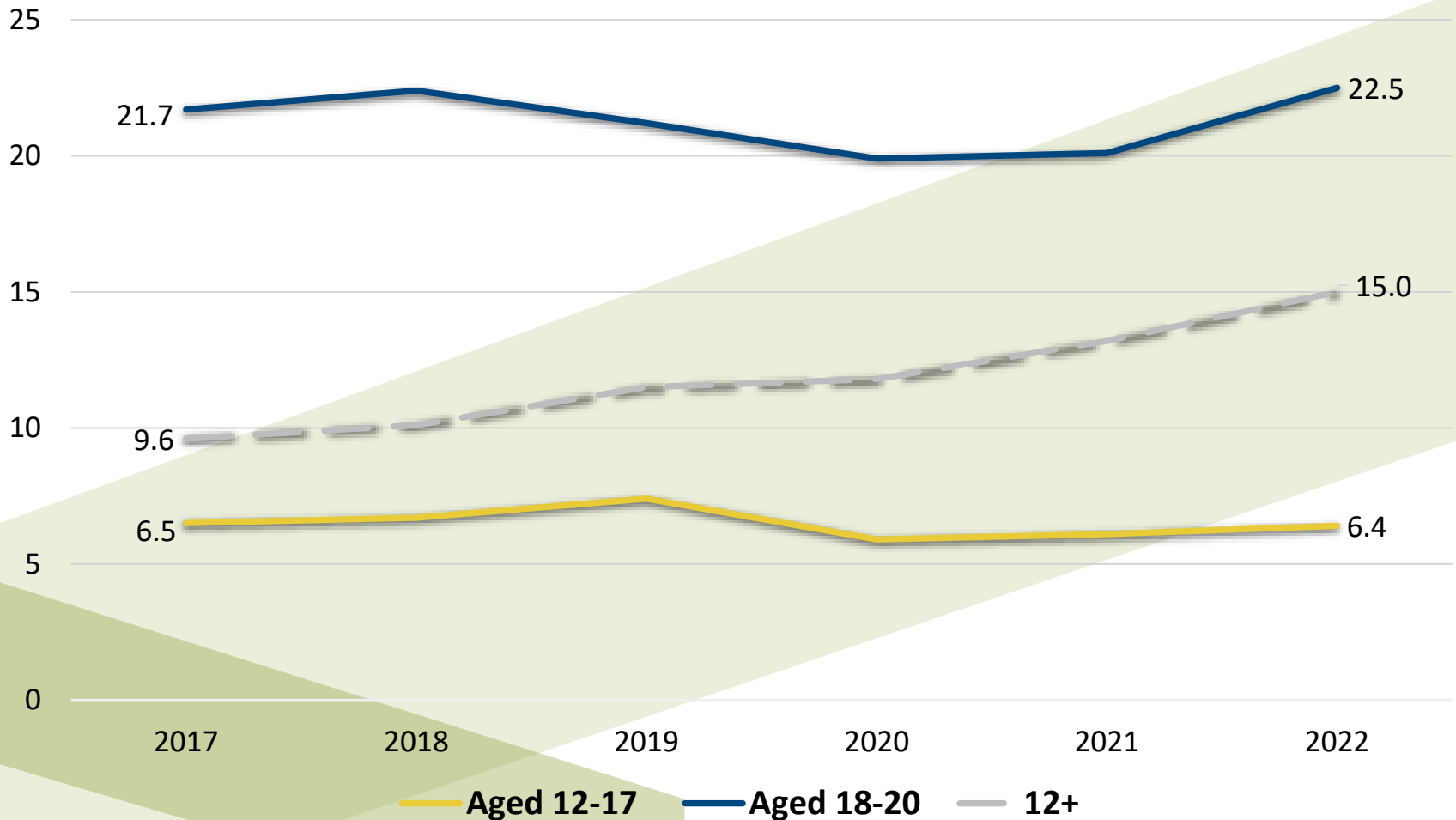


Central East (HHS Region 3)

**PTTC**

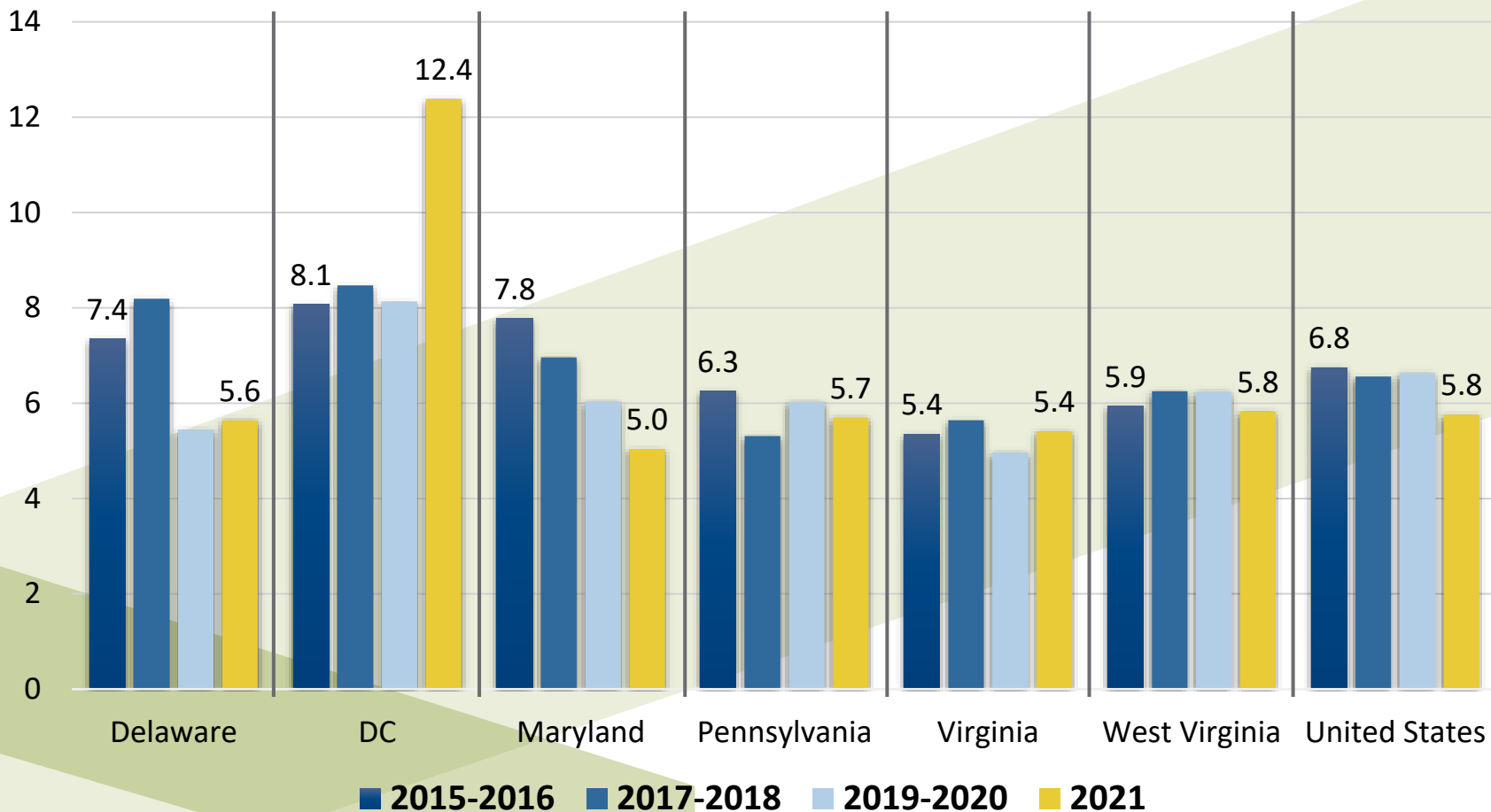
# Past-Month Cannabis Use by Age

Percentages among youth ages 12-17 and young adults ages 18-20



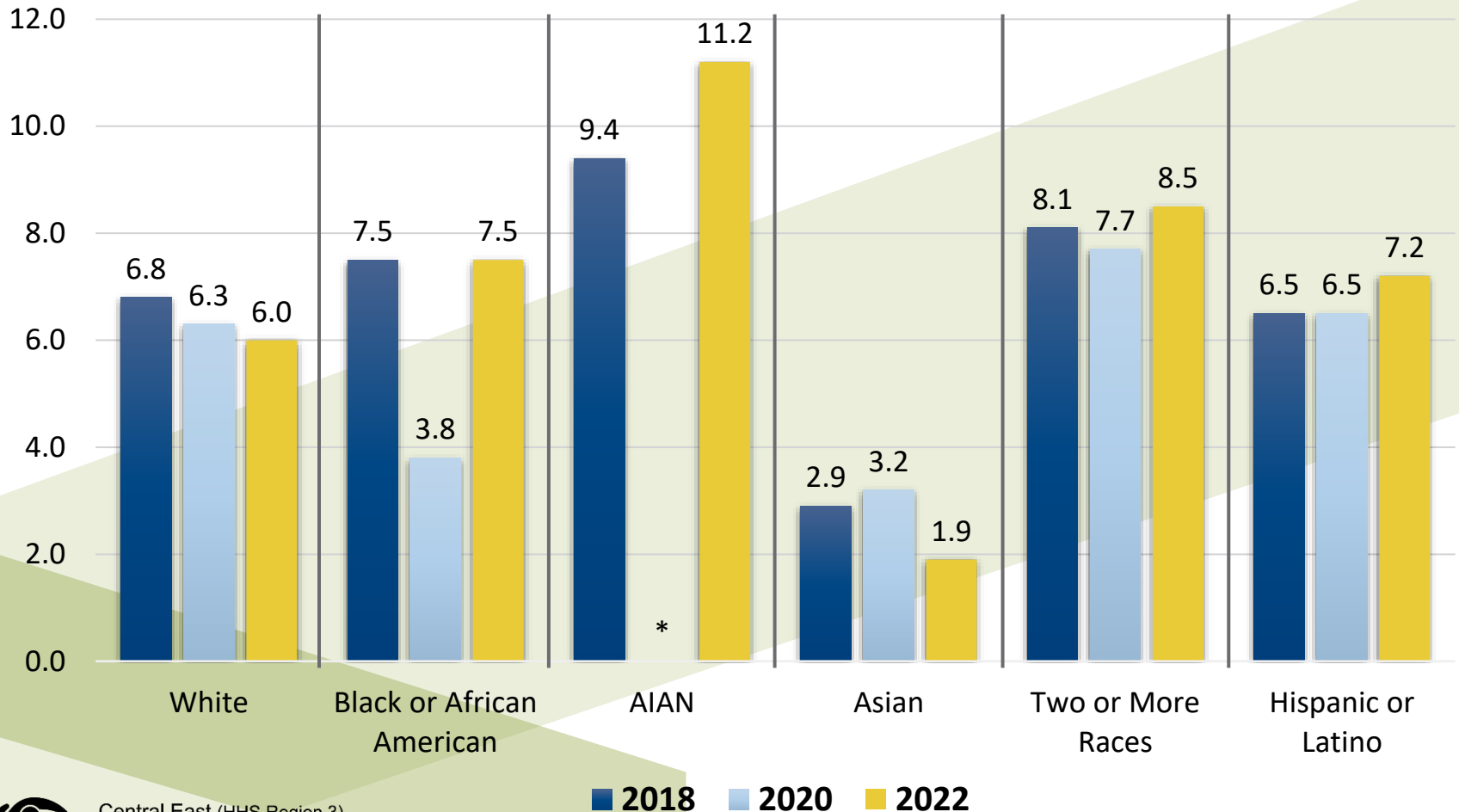
# Past-Month Cannabis Use in the Central East Region

Percentages among youth ages 12-17



# Past-Month Cannabis Use by Race/Ethnicity

Percentages among youth ages 12-17



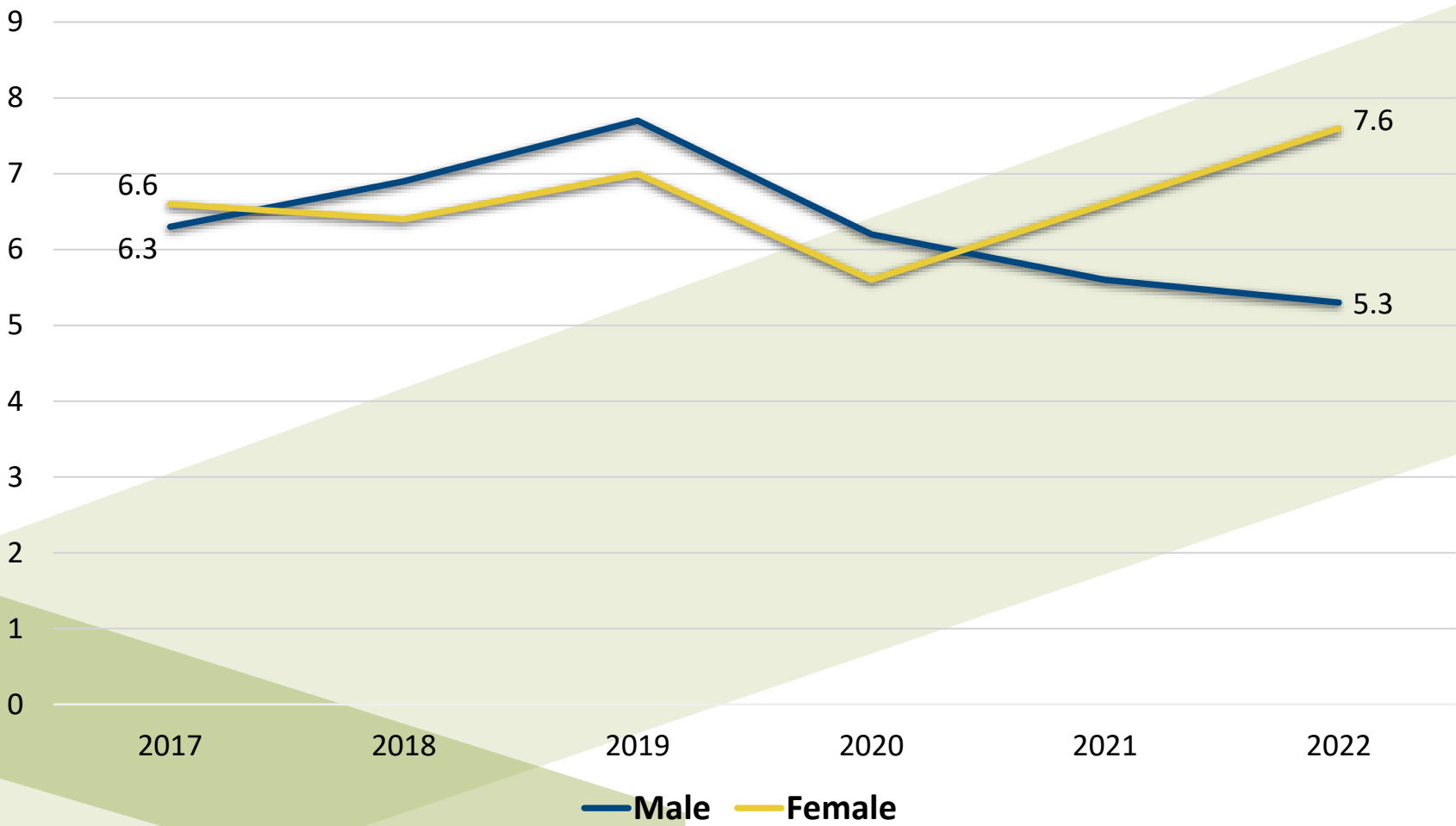
Central East (HHS Region 3)

PTTC



# Past-Month Cannabis Use by Gender

Percentages among youth ages 12-17



# Consequences of Cannabis Use

- May affect brain development among those under 25
  - Casual adolescent users are **2-4x more likely** to develop a mental health disorder than non-users
- Regular exposure to high amounts of THC can lead to development of a use disorder
  - **1.3 million youth** ages 12-17 had cannabis use disorder in 2021
- Can impact academic performance and occupational attainment
- Cannabis is the second most common substance associated with impaired driving (behind alcohol)



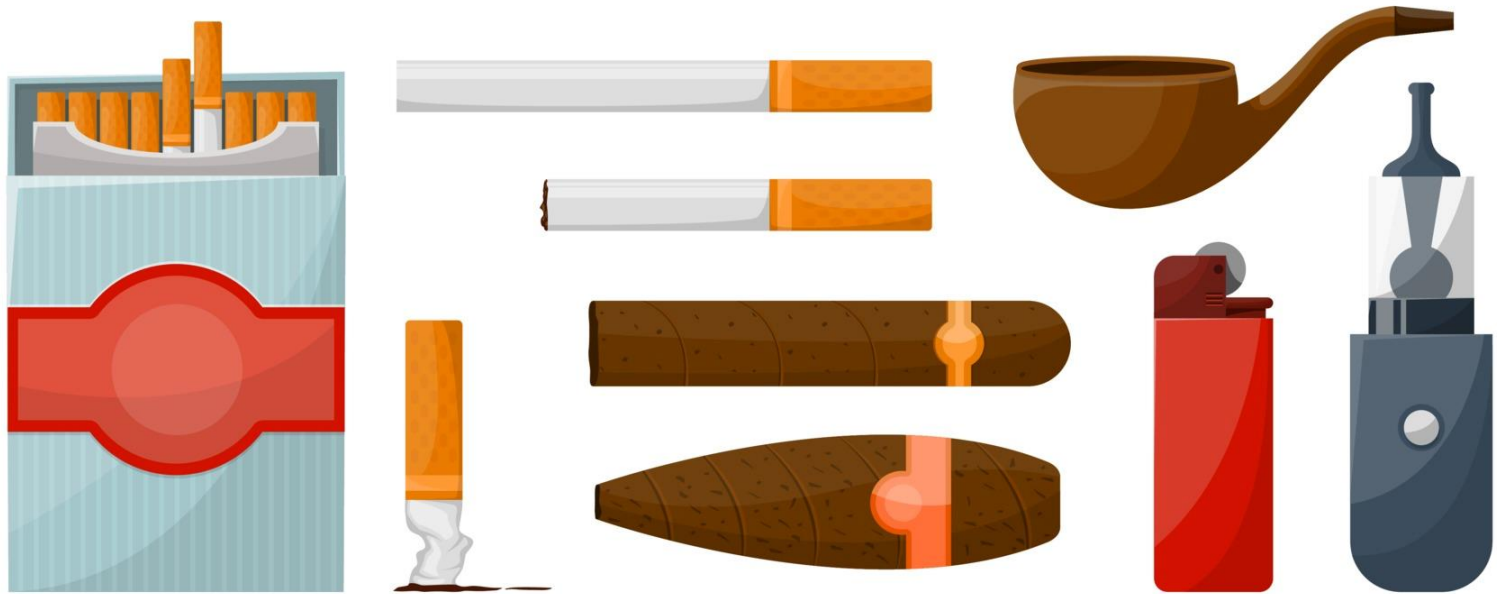
# Mentimeter Activity



**How to  
participate:**

- Scan the QR code from a mobile device OR
- Click on the link in the chat OR
- Go to menti.com and enter the code at the top of this slide.

# Youth Tobacco Use

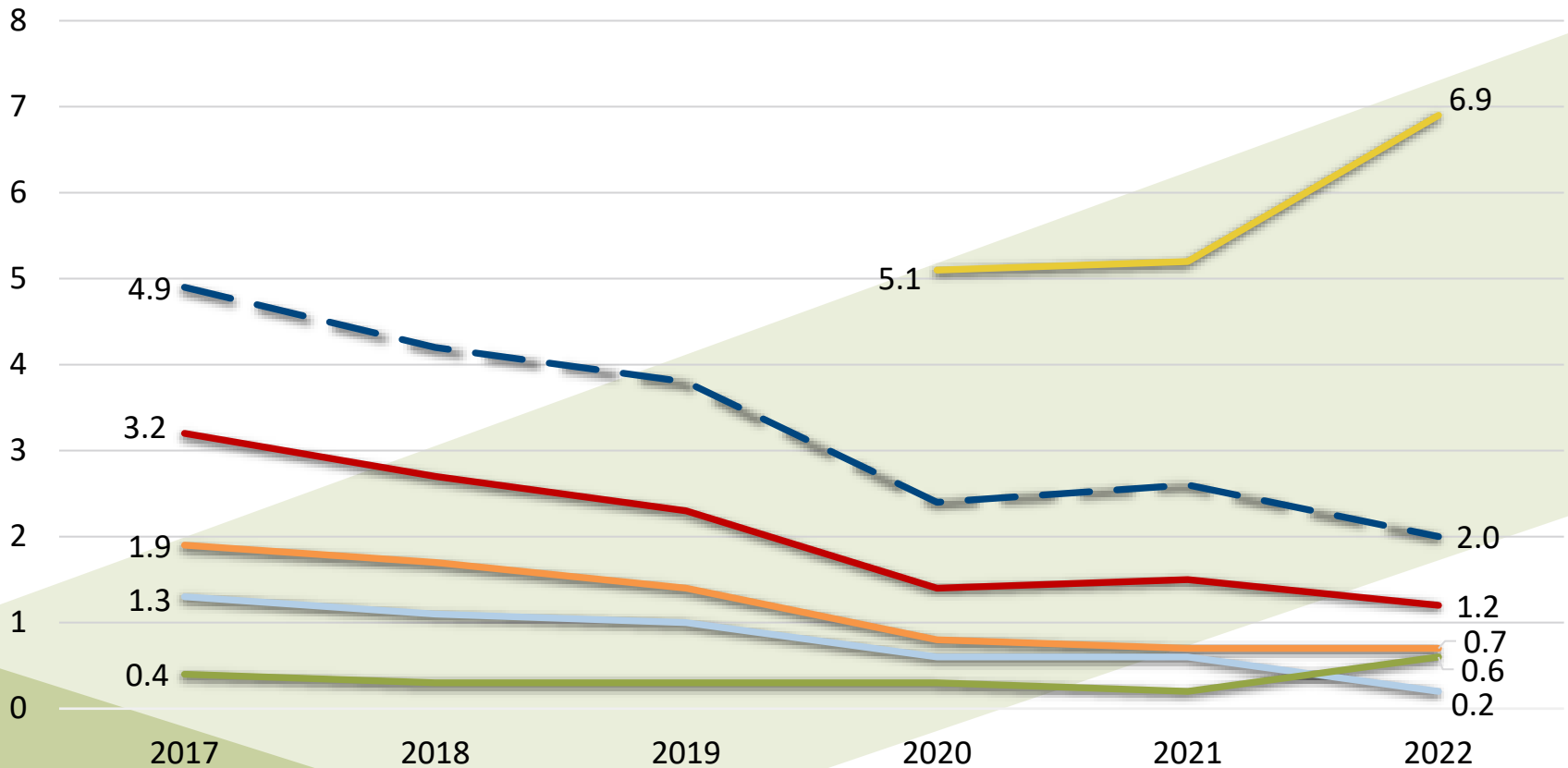


Central East (HHS Region 3)

**PTTC**

# Past-Month Tobacco Product Use by Type

Percentages among youth ages 12-17



— Any tobacco product — Cigarettes — Smokeless tobacco  
— Cigars — Pipe tobacco — Nicotine vaping

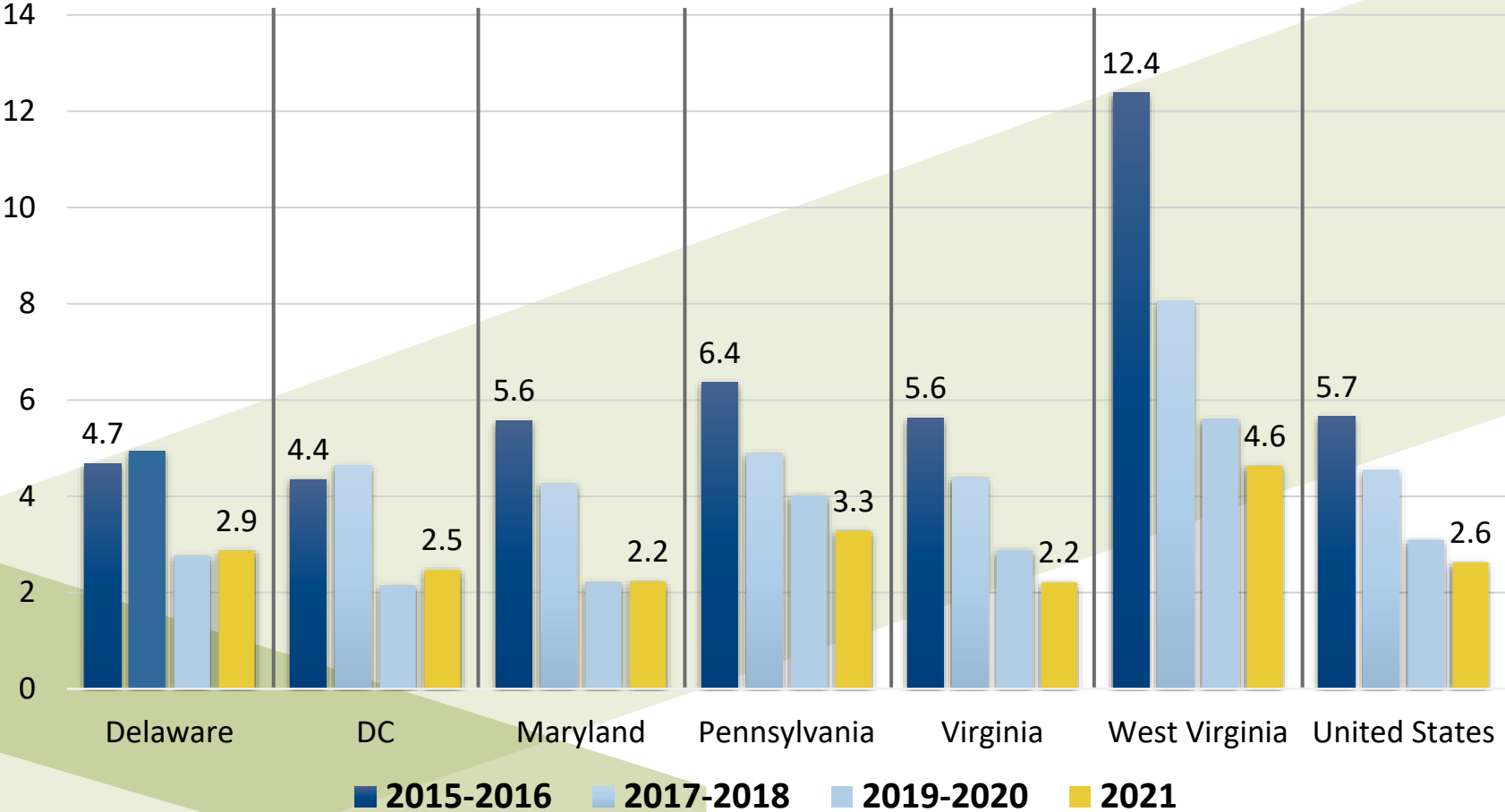


Central East (HHS Region 3)

**PTTC**

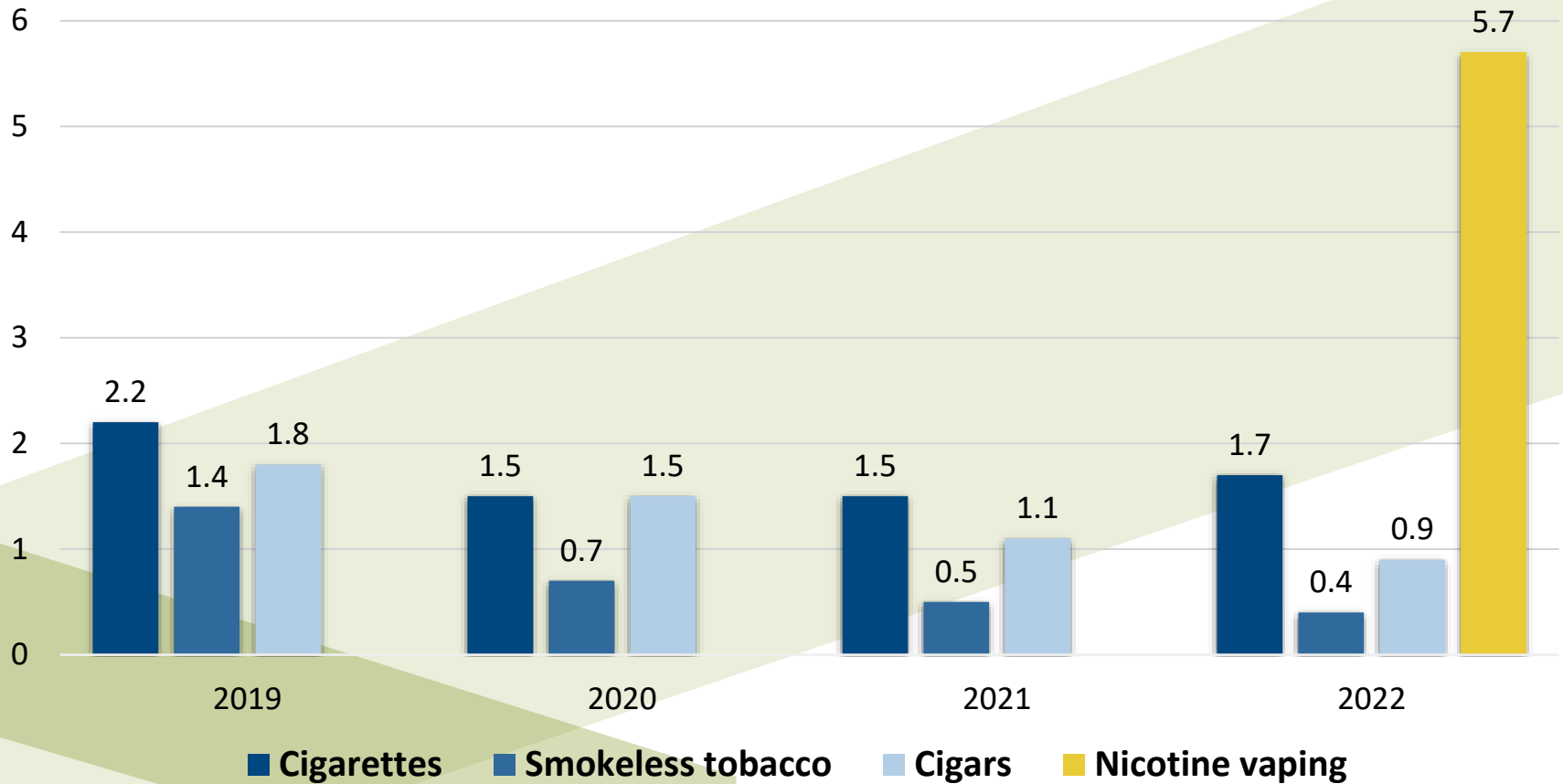
# Past-Month Tobacco Product Use (Excluding Vaping) in the Central East Region

Percentages among youth ages 12-17



# Past-Year Initiation of Tobacco Use by Type

Percentages of youth ages 12-17 who started using tobacco products in the past 12 months



# Demographic Details of Youth Past-30 Day Tobacco Use

Percentages among youth grades 6<sup>th</sup>-12<sup>th</sup>

Tobacco Product	Gender		Race and Ethnicity					Overall
	Male	Female	AI/AN	Black or African American	White	Hispanic or Latino	Multiracial	National
<b>Any tobacco product</b>	11.2%	8.9%	8.0%	9.3%	9.5%	11.7%	12.6%	10.0%
<b>E-cigarettes</b>	9.3%	6.1%	5.9%	5.6%	7.7%	8.5%	10.2%	7.7%
<b>Multiple tobacco products</b>	3.4%	3.4%	2.0%	3.2%	3.1%	3.9%	4.1%	3.4%



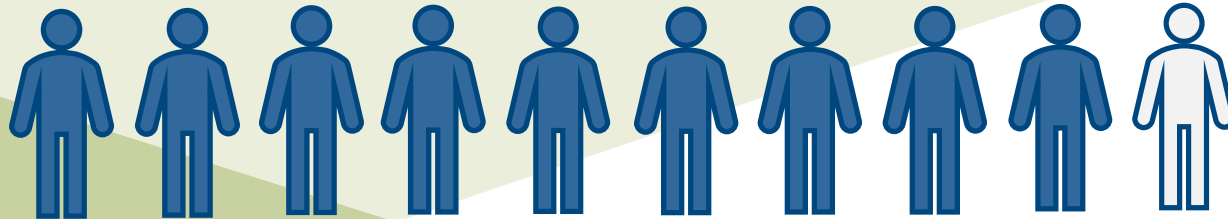
Central East (HHS Region 3)

**PTTC**



# Consequences of Tobacco Use, I

- It is estimated that **5.6 million youth** alive today will die prematurely from a smoking-related illness
- Earlier initiation of tobacco use is associated with an increased risk of nicotine addiction compared to those who start later
  - **9 out of 10** adult daily cigarette smokers first tried smoking before age 18



Central East (HHS Region 3)

PTTC

# Consequences of Tobacco Use, II

- Smoking in adolescence is associated with early heart damage and reduced lung function and growth
- Exposure to nicotine can impair brain development for those under 25, impacting attention, mood, and impulsivity
- Smoking is known to cause cancer in multiple areas of the body, including lungs, bladder, mouth and throat, pancreas, kidneys, stomach, and cervix



# Important Risk Factors for Youth Vaping, Cannabis, and Tobacco Use



**Mental Health Risks**



**Perceptions of Harm**



**Normalization of Use**



**Availability**



Central East (HHS Region 3)

**PTTC**

# Mental Health-Related Risks

- Youth report increases in risks associated with vaping, cannabis, and tobacco use:
  - Boredom
  - Anxiety
  - Depression
  - Loneliness
  - Worry
  - Difficulty sleeping
  - Other negative mental health indicators



Central East (HHS Region 3)

**PTTC**

# Perceptions of Harm: 8<sup>th</sup> Grade

Substance Use	2018	2022
Vaping an e-liquid with nicotine occasionally	16.9%	24.1%
Vaping an e-liquid with nicotine regularly	32.4%	53.2%
<b>Smoke 1-5 cigarettes per day</b>	<b>40.8%</b>	<b>35.5%</b>
Smoke 1 or more packs of cigarettes per day	61.3%	61.9%
Use marijuana regularly	52.9%	53.6%
Vape marijuana regularly	N/A	53.0%

# Normalization of Use: Perception of Benefits

- Youth report regularly hearing positive messages and attitudes towards vaping from friends and older family members who vape
- Appealing flavors and designs of products may be a motivator for use

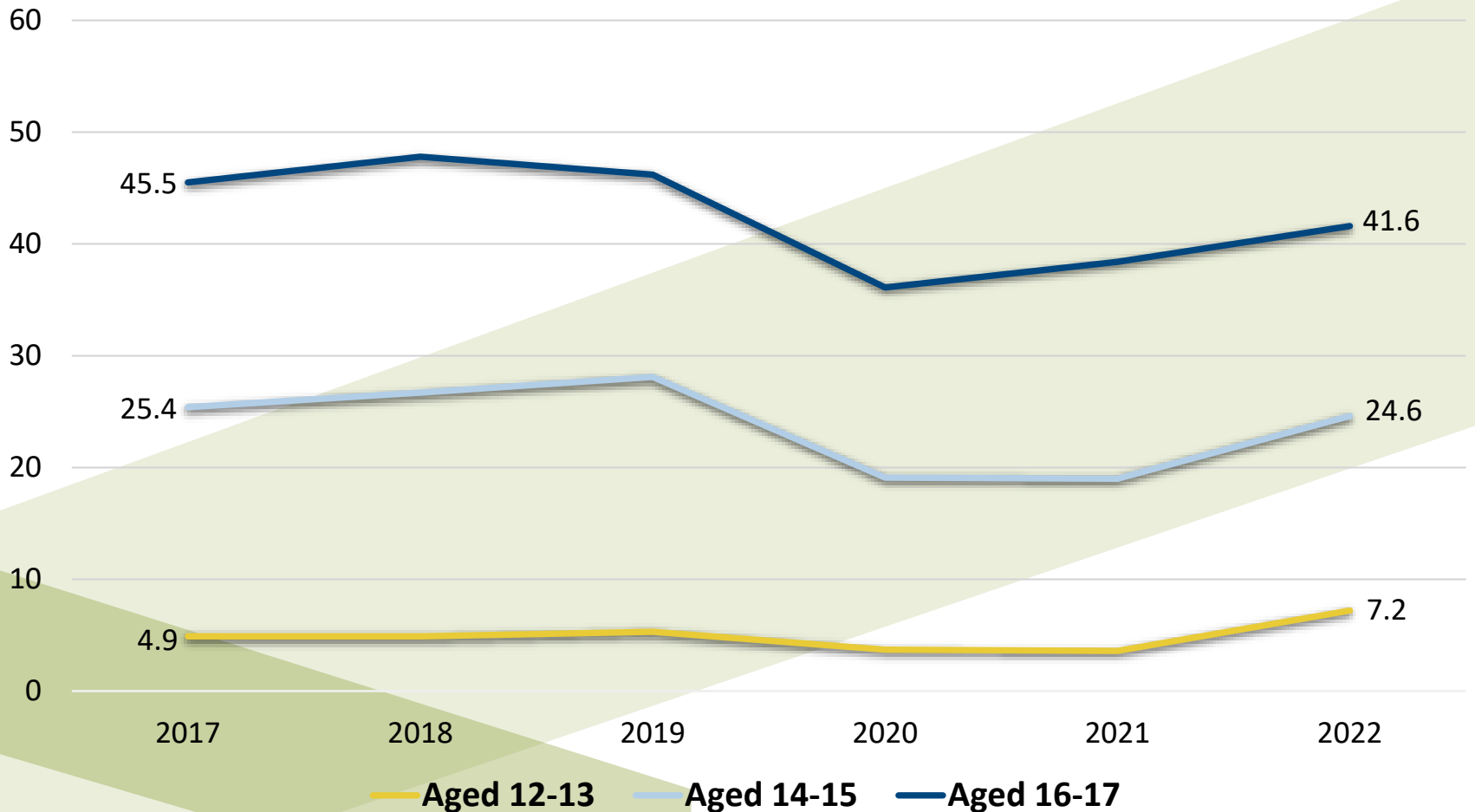


- Youth perceived benefits of cannabis and vaping include short-term mental health outcomes (e.g., reduced anxiety or stress) and “looking cool”



# Normalization of Use: Perception That All or Most Students in Grade Use Cannabis

Percentages among youth ages 12-17



# Availability

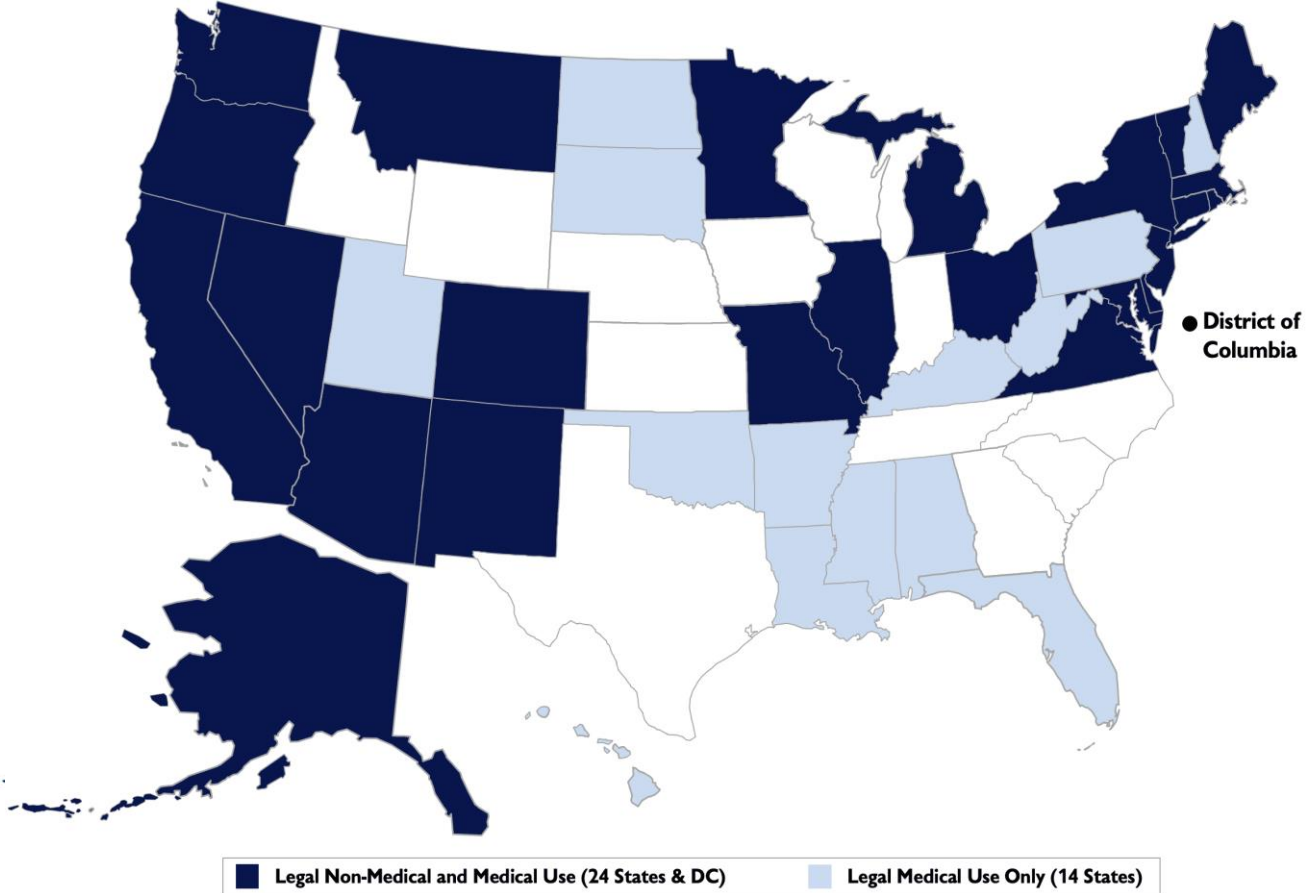
- Vape products are numerous and readily available
  - More than **7,700** vape flavors exist across more than **460** brands
- Until 2019/2021, Synar enforcement did not automatically include vaping products
  - Despite restrictions, e-cigarette sales were **46% higher** in 2022 than 2020
- Youth report that tobacco and cannabis products are easily to obtain through social media
  - Social media accounts ship in discreet packaging, don't require an age minimum to purchase
  - **76.3%** of online retailers allow users to reach the checkout page without age confirmation





# Availability

**Cannabis  
Legalization  
2023**



Source: <https://www.carnevaleassociates.com/our-work/policy-information-briefs.html>



Central East (HHS Region 3)

**PTTC**

# Mentimeter Activity

Join at [menti.com](https://menti.com) | use code 7248 3210



SCAN ME

# Which of these risks are the most pressing to your community?

Mental health risks

Perceptions of harm

Normalization of use

Availability

Other (write in chat)

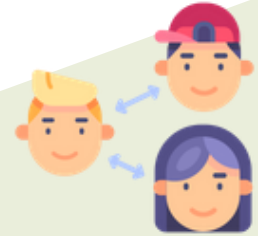
## How to participate:

- Scan the QR code from a mobile device OR
- Click on the link in the chat OR
- Go to [menti.com](https://menti.com) and enter the code at the top of this slide.



# Sample Protective Factors Against Substance Use

- Resiliency
- Social connectedness
- Policies limiting substance availability
- Having structured activities (e.g., faith-based, after school) and opportunities for skill-building
- Parental involvement
- Adequate housing
- Access to health care and social services
- Having peers who do not use substances



# Youth Use and the Social Determinants of Health



Central East (HHS Region 3)

**PTTC**

# The Five Domains of SDOH (HHS)



The SDOH can be thought of as another way to organize and think about community- and society-level risk factors.



Central East (HHS Region 3)

**PTTC**

# Examples of Relevant SDOH

- Societal discrimination and related stress
- Race-based victimization
- Community stress and immigration-related stress
- Normalization of drug trafficking behaviors

All have been associated with increased risk for youth tobacco or cannabis use!

# Conclusion

- Youth substance use data can be difficult to accurately obtain
- But most indications are that vapes and cannabis are major issues
- Other tobacco use continues to decline, but reduced perceptions of harm from smoking are cause for concern
- Increases in various risk factors for youth substance use suggest the need for expanding services
- We'll talk about EBPs in Part 2!

# Q & A

Josh Esrick and Olivia Stuart  
[jesrick@danyainstitute.org](mailto:jesrick@danyainstitute.org)  
[ostuart@danyainstitute.org](mailto:ostuart@danyainstitute.org)



# Contact Us



Central East (HHS Region 3)

PTTC

Prevention Technology Transfer Center Network

Funded by Substance Abuse and Mental Health Services Administration

*a program managed by*



Central East PTTC website:  
[www.pttcnetwork.org/centraleast](http://www.pttcnetwork.org/centraleast)

Danya Institute website:  
[www.danyainstitute.org](http://www.danyainstitute.org)

Deborah Nixon-Hughes, Director:  
[dhughes@danyainstitute.org](mailto:dhughes@danyainstitute.org)

Danya Institute email and phone:  
[info@danyainstitute.org](mailto:info@danyainstitute.org)  
(240) 645-1145

*Funding for this presentation was made possible by SAMHSA grant no. 1H79SP081018. The views expressed by speakers and moderators do not necessarily reflect the official policies of HHS; nor does mention of trade names, commercial practices, or organizations imply endorsement by the U.S. Government.*



Central East (HHS Region 3)

PTTC