

Welcome

Central East PTTC Webinar:

Preventing Youth Vaping Part I: The Extent and Risk Factors for Youth Vaping

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

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Each TTC Network includes 13 centers.*



Network Coordinating Office

National American Indian and Alaska Native Center

National Hispanic and Latino Center

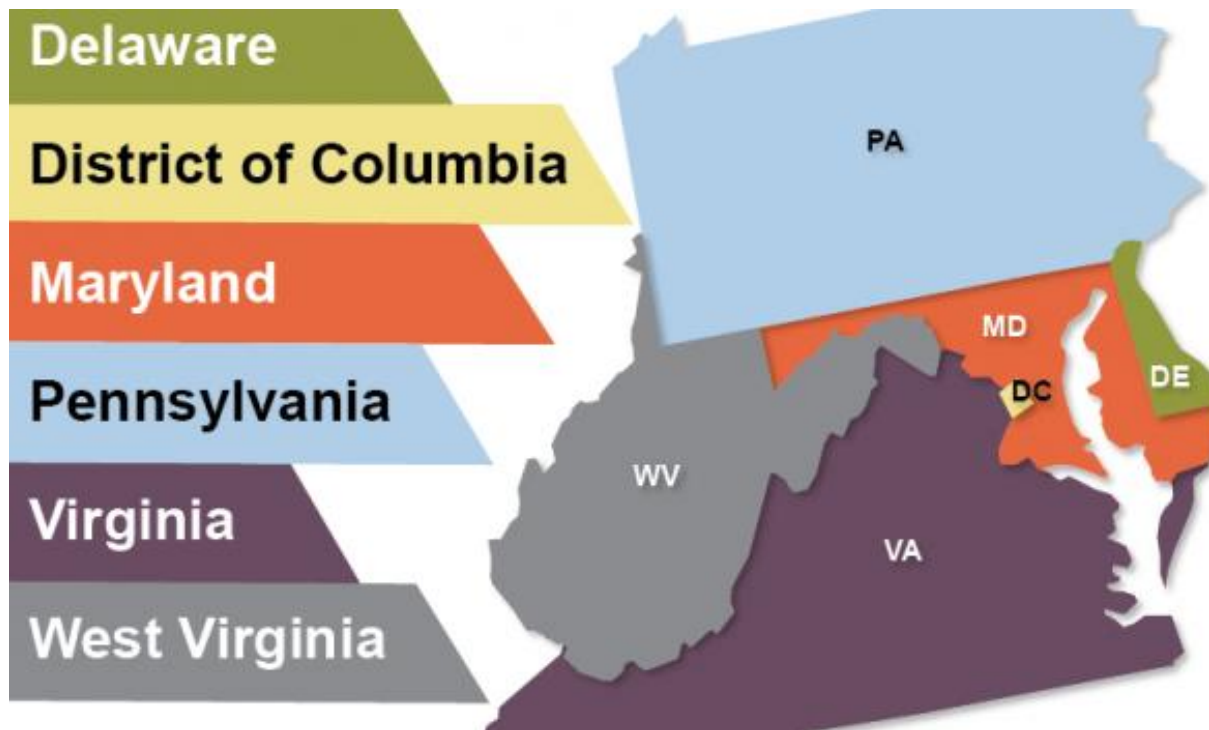
10 Regional Centers (aligned with HHS regions)

**The ATTC Network also includes 4 international HIV centers funded by the President's Emergency Plan for AIDS Relief.*



Central East Region

HHS REGION 3



What We Do

- **Accelerate** the adoption and implementation of evidence-based and promising treatment and recovery-oriented practices and services
- **Strengthen** the behavioral health awareness, knowledge, and skills of the health care and prevention workforce that address the needs of people with behavioral health disorders
- **Foster regional** and national alliances among culturally diverse practitioners, researchers, policy makers, funders, and the recovery community
- **Ensure** the availability and delivery of publicly available, free of charge, behavioral health training and technical assistance to health care and prevention professionals



PTTC Mission



To Strengthen **the Capacity of the Workforce to Deliver Evidence-Based Prevention Strategies and Facilitate Opportunities for Preventionists to Pursue New Collaboration Opportunities, which include Developing Prevention Partnerships and Alliances**



Central East PTTC Specialty Area

Engaging and Collaborating with Primary Care Providers for Substance Use Prevention



Eligibility

Behavioral health and health care providers, consumers, families, state and local public health systems and other stakeholders

Consistent with
Regional, State
and Local
Needs

No cost

Data Driven

EBPs provided
by Subject
Matter Experts



PTTC Focus Areas

- Opioid/harm reduction strategies
- Suicide prevention and substance use overdoses
- Youth vaping/tobacco
- Youth alcohol and suicide
- Health equity and the elimination of disparities
- Trauma
- Workforce leadership development series-
strategic planning/SPF; data-informed decision-
making; environmental strategies



Upcoming Webinars

- Building Capacity for a Public Health Approach to Prevention- **July 16**
- Preventing Youth Vaping Part 2- **August 6**
- Cannabis Use in Pregnancy and Lactation-August 24
- Identifying Emerging Drug Trends- **September 24**

ALL WEBINARS AT 1:00 PM ET



Other Resources in 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



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Prevention Technology Transfer Center Network

Funded by Substance Abuse and Mental Health Services Administration

Preventing Youth Vaping Part I: The Extent and Risk Factors for Youth Vaping

June 25, 2020

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Presenters



Josh Esrick
Presenter



Emily Patton
Presenter



Key Objectives

- Explain the importance of youth vaping as a prevention priority
- Explore prevalence data on vaping and tobacco product use
- Discuss known risk factors for vaping use
- Identify areas where further research is required



Vaping Webinar Series

- Two-Part Series
 - Part I is today and focuses on the scope and importance of the problem
 - And what we know and do not know about the problem
 - Part II is on August 6 and focuses on addressing the problem
 - Current public health responses; challenges; recommendations and promising practices



Background on Youth Vaping

- Increases in youth vaping rates present an urgent public health challenge
- Youth vaping threatens to undo decades of success in reducing youth tobacco use rates
- The 2019 acute lung injury epidemic reveals the additional risk of unknown dangers from vaping
- Research shows unique risk factors for vaping that must be addressed directly



Importance of Preventing Youth Vaping

- Data shows huge increases in rates of youth vaping
 - Far greater than the continued declines in tobacco use
- Meaning that while some youth who are vaping may be using it as a substitute for tobacco use; most would likely not be using any substances if vaping had been introduced
- Vaping presents many known and unknown dangers to youth



Dangers of Vaping

- While cigarettes may be more dangerous due to the huge number of carcinogens in them, vaping presents many dangers on its own
 - Both nicotine and Tetrahydrocannabinol (THC) exposure has been linked to negative health outcomes among youth (Callahan-Lyon, 2014; Weir, 2015)
 - Vaping liquid contains chemicals untested for safety when inhaled (American Academy of Pediatrics; AAP)
 - Association between vaping nicotine and lung cancer found in study of mice (Tang, 2019)



Dangers of Vaping, cont.

- Nicotine addiction from vaping can lead to future use of other tobacco products (AAP)
- Liquid nicotine presents an environmental hazard to infants and children (AAP)
- Risk of the unknown due to the mostly unregulated and under-researched nature of vaping



Past Success in Youth Tobacco Prevention

- High school cigarette use declined 87% from 1997 to 2019 (Monitoring the Future; MTF)
 - Past-month prevalence declined from 28.3% to 3.7%
- High school smokeless tobacco use declined 68% from 1994 to 2019 (MTF)
 - Past-month prevalence declined from 9.7% to 3.1%
- Various cigar and hookah use data only collected since 2014, but all also show declines



Contrast With Vaping

- Importantly, all these declines are still occurring
 - Year-over-year declines in use of each tobacco product since 2009 (2014 for cigars and hookahs)
- Vaping is different
- From 2017 to 2019, past-month high school vaping increased (MTF):
 - From 12.0% to 22.5% for any vaping
 - From 7.5% to 18.1% for vaping nicotine
 - From 3.6% to 10.1% for vaping marijuana



Other Vaping Data

- National Survey on Drug Use and Health (NSDUH) has not previously asked questions about vaping prevalence
- National Youth Tobacco Survey found even larger increases in high school vaping rates
 - From 11.7% in 2017 to 27.5% in 2019
- CDC Youth Risk Behavioral Surveillance System surveys have asked about vaping, but longer data lag
- We'll talk about other vaping data as we get to it in other sections of this and the second webinar



Perceptions of Vaping Harm

- Perceptions of harm around vaping an e-liquid with nicotine for students have historically been low (MTF, 2019)
 - Occasional Vaping, 16.4%-18.3% (2017)
 - Regular Vaping, 27%-32.7% (2017)
- There was a large increase in the perceived risk of regularly using nicotine vaping in 2019 among 8th-12th graders (MTF)
 - 38-42% considered vaping regularly a "great risk"
 - Younger students perceived greater risk of vaping compared to older students



Perceptions of Vaping Harm, cont'd

- Even with this increase, vaping is still among the lowest when compared to other substances for perceived risk (MTF, 2019)
- This could be because youth who vape do not always know how much nicotine they are consuming (Alexander et al, 2019)
- Also, youth report regularly hearing positive messages and attitudes towards vaping from friends and older family members who vape (Alexander et al, 2019)



Vaping Availability

- As of 2014 there were at least (Zhu et al, 2014):
 - **460** different vaping brands
 - **7,700** vaping flavors
- In addition to retailers (online and in-store) and social sources, there is a large black market for vaping and THC products (NIH, 2018)
- Many youth say vaping devices are “fairly easy” or “very easy” to get (MTF, 2019)
- Online purchasing – Vapes are very easy to buy compared to cigarettes (Tobacco-Free Kids, 2019)
- Synar checks are not automatic for vaping (SAMSHA, 2019)



Regulating Vaping

- Vaping refers to a multitude of products making it difficult to regulate
- THC vaping
 - Illegal under Federal law but State laws may differ
 - Food and Drug Administration (FDA) does not regulate THC vaping
- In 2016, FDA asserted the authority to regulate vapes as tobacco products (USFDA)
 - Banned sales to minors; advertising restrictions (Sharpless, 2019)
 - The long delay in regulations may have helped enable the spread of vaping; and many regulations are still not in place



Regulating Vaping cont'd

- FDA currently does not review or regulate vaping products before they are put on the market
- Lack of manufacturer-provided information (JUUL, 2019)
 - Ingredients
 - Design flaws
 - May be linked to toxic heavy metal in vaping liquids and other accidents (Hess, et al 2017)
- August 2022 target date to implement product approval process and future standards (USFDA, 2019)
 - Seeks to add more robust regulatory oversight
 - Has been delayed numerous times



Future Research Opportunities, 1

- Potential effectiveness of current prevention efforts
 - Current education and awareness campaigns
 - Existing regulations
 - Including Tobacco 21 implementation
 - Accuracy of retailer- and manufacturer-provided information
 - State and local bans
 - Mostly struck down by courts
 - Had been focused on preventing acute injury



Future Research Opportunities, 2

- Vaping risk factors and the characteristics that make them distinct from other tobacco product risk factors
 - What causes the lower perception of harm of vaping?
 - What caused the perception of vaping to be an attractive activity to engage in?
 - How effective were the unregulated ads targeting youth?
- Dangers of vaping
 - Some dangers are known, but many unknown risks remain



Future Research Opportunities, 3

- Identifying new prevention efforts
 - Expanding regulatory scope
 - FDA product manufacture regulations
 - Enforcing new and existing regulations
 - Synar and other retailer checks
 - Manufacturer inspections
 - Changing focus of education and awareness campaigns
 - Other strategies



Moving Forward

- Much more research is needed on both the dangers of vaping and evidence-based approaches for preventing youth vaping
- However we do know some current approaches are likely to help, so long as they are fully implemented
- Next webinar we'll talk more about current and potential future public health responses to youth vaping



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



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