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We advance health and healthy living for children and families through cutting-edge research, innovative community-based programs, and dissemination of evidence-based practices.

#### STRATEGIC PLAN GOALS



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## **Upcoming Center Webinars**

THURSDAY, MAY 9 12–1:30 PM CST

Parenting Begins before Birth: The New Science of Prenatal Programming and Early Brain-Behavior Development



**Catherine Monk, Ph.D.** Diana Vagelos Professor of Women's Mental Health



#### 2024 Pediatric Brain Health Webinar Series

Promoting family & provider mental well-being





## **Upcoming Center Webinars**

Wednesday, May 22 12–1:30 PM CST

Challenges and Opportunities in Meeting the Mental Health Needs of Families in the Perinatal Period.



Darius Tandon, PhD

Professor, Department of Medical Social Sciences Director, Center for Community Health, Northwestern University Feinberg School of Medicine



#### **2024 Pediatric** Brain Health Webinar Series

Promoting family & provider mental well-being







Cannabis Vaping among Youth and Young Adults

*Prevalence, Trends, Need for Intervention* 

#UTHealth Houston School of Public Health





### Overview

- Cannabis use among youth and young adults
  - Prevalence
  - Modality
  - Health/social consequences
- Implications for Intervention



#### **The National Picture**

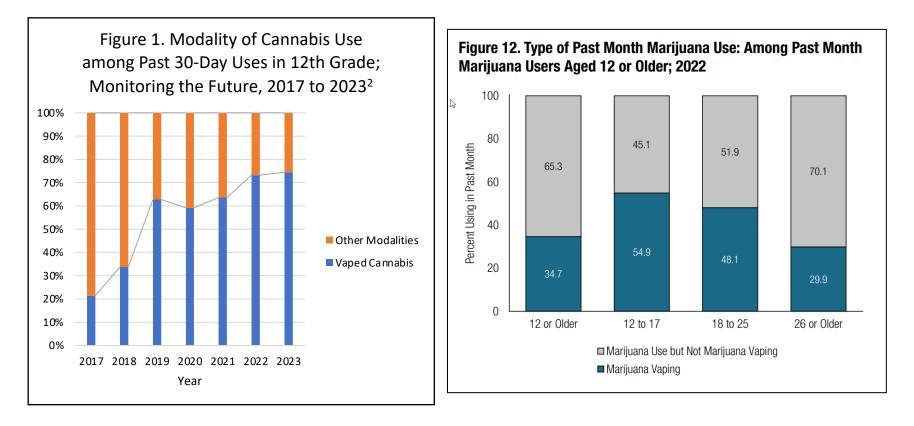
- Cannabis is the **third most used substance** among youth (ages 12-17) and young adults (ages 18-25), behind alcohol and nicotine.<sup>1</sup>
- Approximately 1.2M youth and 1.2M young adults initiated cannabis use in 2022.<sup>1</sup>
- Nearly 26% of young adults and 6.4% of youth used cannabis in the past 30-days.<sup>1</sup>





#### **Cannabis Modality**

#### Vaping has become the modality of choice for young marijuana users







#### Texas is young

#### In 2023, Texas had over 30.5 million people;

7.56 million of them under the age of 18.

ONE of Texas' residents are under the age of 18.







#### Texas is diverse



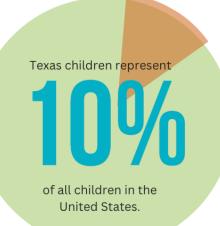
49.3% Hispanic or Latino

32.4% White (non-Hispanic)

12.9% Black or African-American

5.2% Asian

0.3% American Indian





58.9 WHITE 39.8

In 2021, 2022,\* and 2023,\* roughly **one in ten U.S. births** occurred in Texas.

\*preliminary data





## **Cannabis Vaping in Texas**

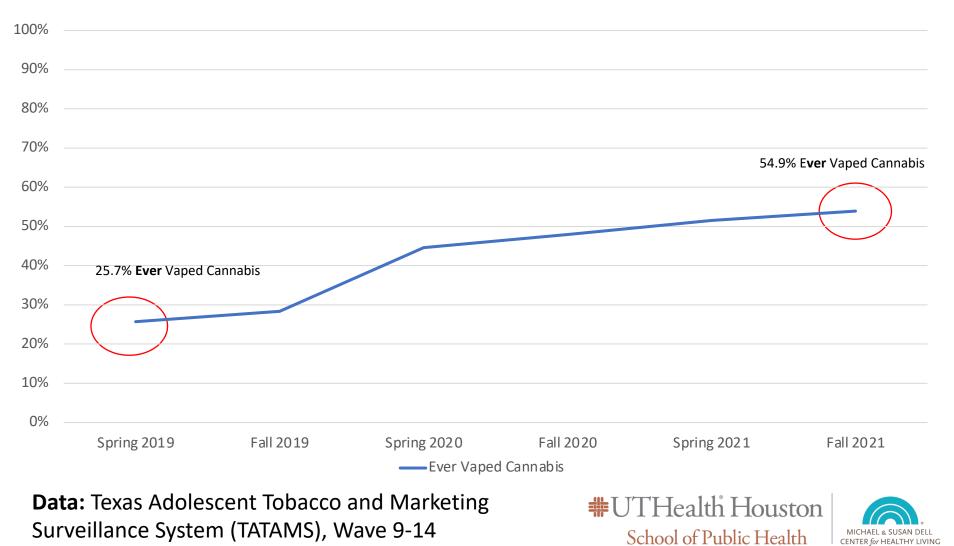
- Texas Adolescent Tobacco and Marketing Surveillance System (TATAMS)
- Participants were youth and young adults in urban Texas
  - Austin, DFW, Houston, San Antonio
- Six waves of data spanning Spring 2019 to Fall 2021
  - Data collected every 6-months
- Participants were recruited within age-cohorts
  - 11<sup>th</sup> grade, 1 year post HS, and 3 years post HS
- Large, diverse cohort
  - N=2,395 participants (57% Female; 43% Male)
  - 37% Hispanic, 15% NHB, 16% NHO, 32% NHW



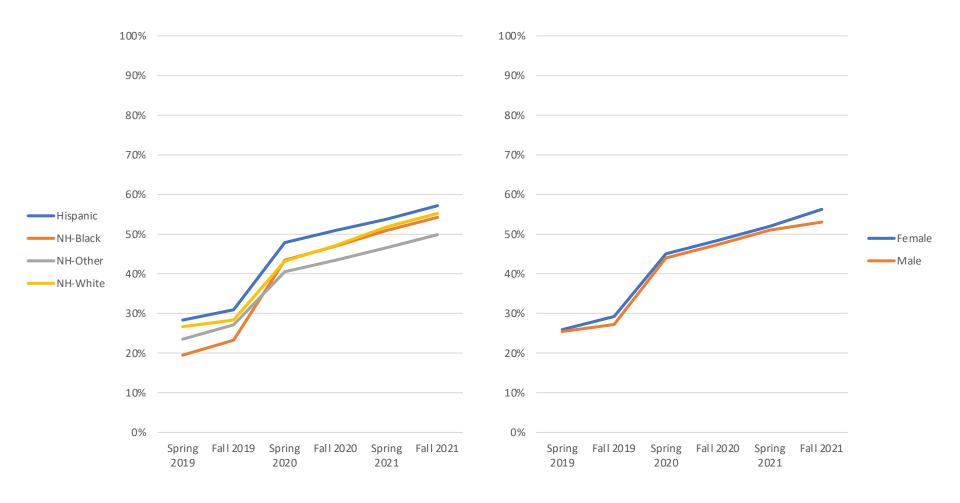


### **Cannabis Vaping in Texas**

#### **Ever Vaped Cannabis**



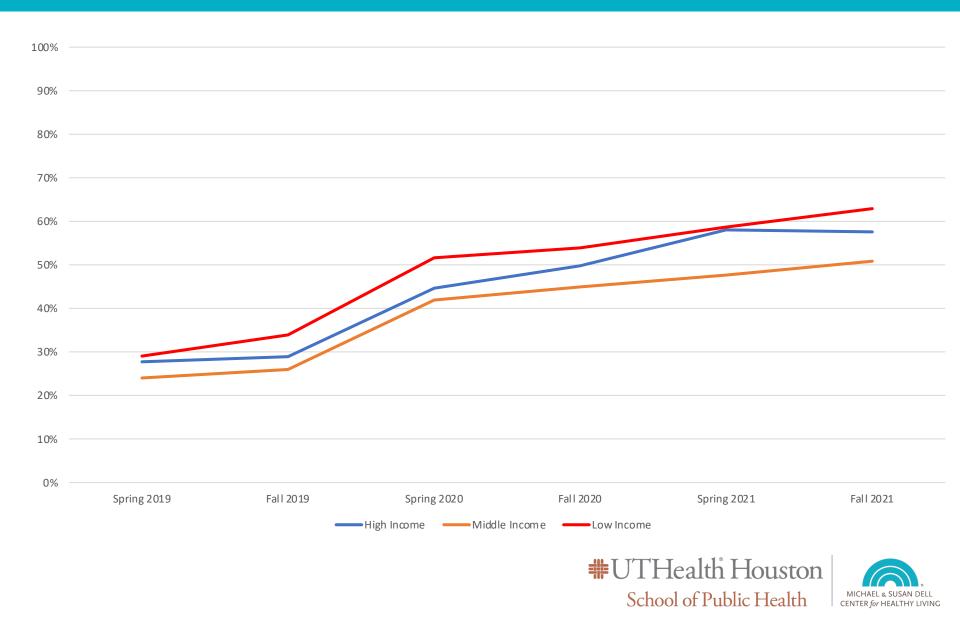
#### **Ever Cannabis Vaping by Demographics**





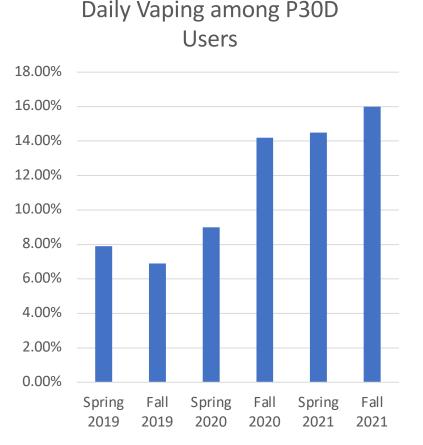


### **Cannabis Vaping by Income**



### **Current Cannabis Vaping**

- Current vaping rate was ~13.5% among all participants.
  - Between 10% to 16%, per wave
- Nearly 1 in 3 who ever vaped cannabis became current users.
- 9.5% were vaping cannabis daily.







## Health Consequences of Cannabis

- Cannabis use inhibits healthy brain development, though the biological mechanisms through which this occurs is not fully understood.
- Cannabis use during adolescence can result in lower white matter integrity and thinning of the cerebral cortex, resulting in excessive neural activity.<sup>3-5</sup>
- This is linked to poor mental health outcomes, including depression and anxiety, during young adulthood.<sup>6</sup>





#### Vaping Associated Lung Injury (EVALI)

- In 2019, EVALI caused more than 2,400 hospitalizations and 50 deaths.<sup>7</sup>
- Over 75% of EVALI patients were under 35 years of age.<sup>7</sup>
- The CDC linked Vitamin E acetate, a thickening agent used in illicit cannabis products, to the EVALI outbreak.<sup>7</sup>

In states where cannabis use was prohibited, EVALI was 3 to 7 times more prevalent, relative to states where cannabis was legal for adult use.<sup>8,9</sup>



## Legal and Social Consequences

- Cannabis is federally illegal (Schedule I Drug).
- Legal consequences include:
  - Felony charges that carry jail time of up to 1 year
  - Loss of eligibility for federal aid for higher education
- Social consequences include:
  - School suspension and/or expulsion
  - Reduced economic and social mobility





#### **Call to Action**

- In 2021, SAMHSA issued a report outlining the need to prevention cannabis use among young people.
- This report emphasized:
  - Community engagement
  - Financial sustainability
  - Tailored interventions
  - Staff Training
- Built upon established tobacco control efforts
  - Policy/taxation
  - Communication campaigns
  - School-based interventions

EVIDENCE-BASED RESOURCE GUIDE SERIES

#### Preventing Marijuana Use Among Youth







## **Addressing Cannabis Vaping**

- Vaping nicotine is the strongest and most consistent predictor for vaping cannabis.
- Similarities between nicotine and marijuana vaping:
  - The rapid increase in marijuana vaping mirrors the transition to nicotine vaping observed in youth over the past decade.
  - Reasons for nicotine vaping flavors, concealability, ease of use – are similar to marijuana vaping.
  - One device can aerosolize both substance.

Ever Nicotine Vaping, High School Students in 2022 100% 90% 80% Lifetime Cannabis Vaping 70% 60.0% 60% **Ever Vaped Nicotine** 50% 40% 30% 20% 8.1% 10% **Never Vaped Nicotine** 0% Lifetime Cannabis Vaping

Prevalence of Lifetime Cannabis Vaping by





### **Shared Risk Factors**

- There is considerable overlap in the determinants of nicotine and cannabis vaping among youth.
- Social Norms:
  - Youth who live with an e-cigarette user have higher prevalence of cannabis vaping than those who live with users of other tobacco products.
  - Parental monitoring similarly predicts initiation of nicotine and cannabis vaping
- Harm perceptions:
  - Lower perceived harm of nicotine e-cigarettes results in a 27% increase in vaping cannabis.
- The overlap and blending of these social-cognitive determinants within the same modality provides theoretical and practical justification for addressing these behaviors via a universal intervention.





#### **Integrative Intervention**

# CATCH MY BREATH

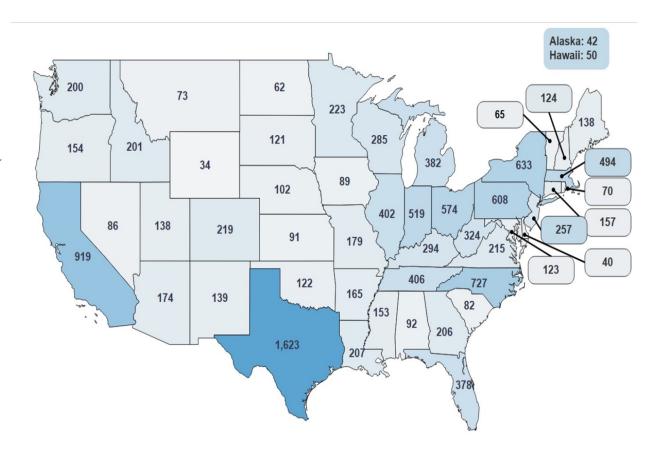
Founded in Social Cognitive Theory

- For grades 5-12, with four age-appropriate lessons by grade level
- Core lessons and training available in English and Spanish
- Already used in 2,500+ districts; business infrastructure of single sign-on integration, vendor registration with procurement etc.
- Meets federal (US) and state education standards
- Evidence-based and proven effective through peer reviewed research
- Endorsed as program of choice by reputable education, public health, and government entities of all shapes and sizes



### **CATCH My Breath**

- Over 5,500 schools
- 90% of large-mega districts have one or more CATCH My Breath users
- Over 750 CATCH My Breath trainers implementing the program in their communities
- Components include:
  - 4 lessons
  - Parent toolkit







## **Cannabis Lessons (In Development)**

• Currently have a cannabis vaping prevention lesson that can be added to the CATCH My Breath program

#### • Includes:

- Knowledge about the health impacts of cannabis vaping
- Social norms and outcome expectations for not using cannabis
- Group activity to practice refusal skills



#### Fact Vs. Fiction | Cannabis

**Directions:** Read the statements in the middle column. Then, put a "T" in the left column if you think the statement is true and an "F" if you think the statement is false. Later with your group, use **The Facts: Cannabis Research** to gather information and write the correct answer in the column on the right.

Guess (True or False)	Cannabis Fact or Fiction?	Answer (True or False)
	Cannabis use can cause Cannabis Use Disorder.	
	2 Cannabis can affect your mental health.	
	3 Using cannabis as a teen can cause damage to your brain.	
	4 Cannabis is a plant, so it's harmless.	
	5 In my state cannabis is legal for kids under 18 to purchase and use.	









#### What is Cannabis?



# A **psychoactive drug** found in the form of:

- shredded plant material in joints or blunts
- edible products (cookies, gummies)
- liquid in cannabis vape pens

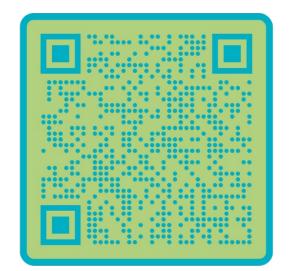




#### Thank you!



#### **View our Center's webinars**







**Cannabis Vaping among Youth and Young Adults: Prevalence, Trends, Need for Intervention** 

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