### Nineteenth Meeting of the HB 21-1317 Scientific Review Council

**November 6, 2024** 







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### **Opening Remarks, Introductions and** Welcome; Updates on Conflict of Interest

Christopher E. Urbina, MD, MPH Chair, HB 21-1317 Scientific Review Council







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### **Scientific Review Council Members**

Member	Role on Council	Affiliation(s)
Chris Urbina, MD, MPH (Chair)	Preventive medicine specialist (or preventive medicine public health professional)	Arapahoe Department of Public Health and Environment; Former Director of CDPHE
Gregory Kinney, PhD, MPH	Epidemiologist	Colorado School of Public Health
Kelly Knupp, MD	Physician familiar with the administration of medical marijuana pursuant to current state laws to those aged zero to seventeen	University of Colorado School of Medicine
Kennon Heard, MD	Medical Toxicologist	University of Colorado School of Medicine
Archana Shrestha, MD	Neurologist	University of Colorado School of Medicine
Erica Wymore, MD, MPH	Pediatrician, Neonatal-Perinatal Medicine	University of Colorado, School of Medicine
Paula Riggs, MD	Psychiatrist	University of Colorado, School of Medicine
Susan Calcaterra, MD, MPH	Internal medicine physician (or other specialist in adult medicine)	University of Colorado School of Medicine
Joseph Schacht, PhD	Licensed Substance Abuse Disorder Specialist	University of Colorado School of Medicine
Kent Hutchison, PhD	Neuropsychopharmacologist	University of Colorado School of Medicine
Lesley Brooks, MD	Medical professional (or public health professional) who specializes in racial and health disparities and systemic inequalities in health care and medicine	North Colorado Health Alliance; SummitStone Health Partners

### Cannabis Research & Policy Project Team Members

Member	Sub-Team
Lisa Bero, PhD	Systematic Review
Ashley Brooks-Russell, PhD, MPH	Subject Area Expertise
Meghan Buran, MPH	Administration
Annie Collier, PhD	Education Campaign
Jenn Leiferman, PhD	Education Campaign
Louis Leslie, BA	Systematic Review
Tianjing Li, MD, PhD, MHS	Systematic Review
Jean-Pierre Oberste, MPH	Systematic Review
Christi Piper, MLIS	Systematic Review
Thanitsara Rittiphairoj, MD, MPH	Systematic Review
Daphna Rubin, MPH	Education Campaign
Jonathan Samet, MD, MS	Administration
Neeloofar Soleimanpour, MPH	Administration
Greg Tung, PhD, MPH	Administration, Subject Area Expertise, Education Campaign
Sam Wang, MD	Subject Area Expertise
Tsz Wing Yim, MPH	Systematic Review

## Review of Agenda

Christopher E. Urbina, MD, MPH Chair, HB 21-1317 Scientific Review Council





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### Scientific Review Council Meeting Agenda

2:30 PM	Opening Remarks, Introductions and Welcome, Updates on Conflict of Interest	Chris Urbina
2:35 PM	Review of Agenda and Meeting Minutes (8/08/24)	Chris Urbina
2:40 PM	Updates from the Research Team's Activities	Jon Samet & Greg Tung
2:50 PM	Updates from Initium	James Corbett
3:10 PM	SRC Discussion	Chris Urbina
3:20 PM	Review of Educational Campaign Evaluations	Greg Tung & Annie Collier
3:35 PM	SRC Discussion	Chris Urbina
3:50 PM	Next Steps & Closing Remarks	Jon Samet & Chris Urbina

## Review of Meeting Minutes

Christopher E. Urbina, MD, MPH Chair, HB 21-1317 Scientific Review Council







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### **Prior Reports & Meeting Materials Available**





The Cannabis Research & Policy Project team is a group of researchers from the Colorado School of Public Health and the University of Colorado Anschutz Medical Campus.

https://coloradosph.cuanschutz.edu/research-and-practice/practice/cannabis-research/resources

## **Updates from the Research Team**

Jonathan Samet, MD, MS Professor & Former Dean, Colorado School of Public Health

Greg Tung, PhD, MPH Associate Professor, Colorado School of Public Health







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# Introduce Members & Partners of the Educational Campaign

Greg Tung, PhD, MPH Associate Professor, Colorado School of Public Health







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### **Updates from Initium Health**

James Corbett, MDiv, JD Initium Health







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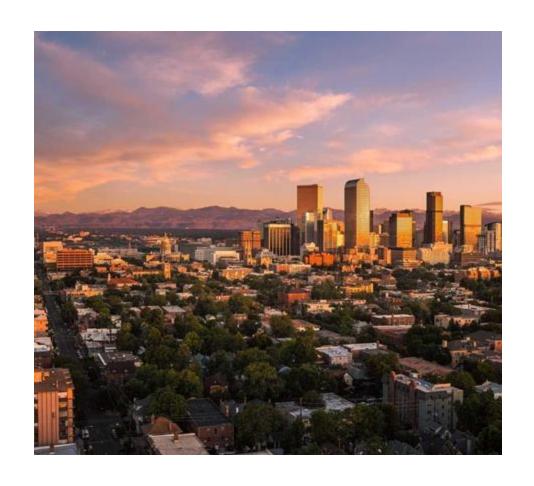


### High Concentration Cannabis Educational Campaign

November 6, 2024

## Agenda

- Review
- Year 2
  - Timeline
  - Press Conference
  - Workstreams
- Next Steps



### Review

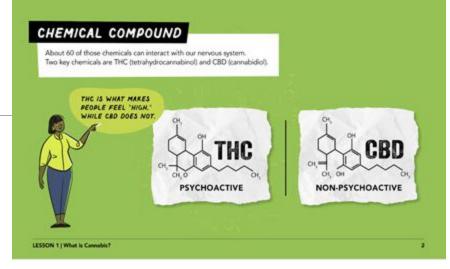
### **Photoshoot**



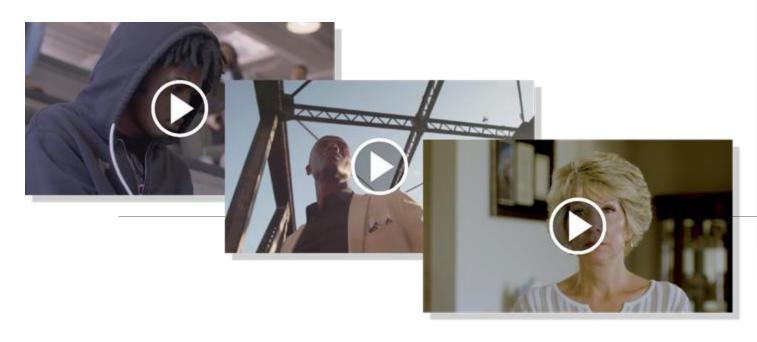
### Website & Web-Based Curriculum







## Podcast & Video Series of Lived Experiences



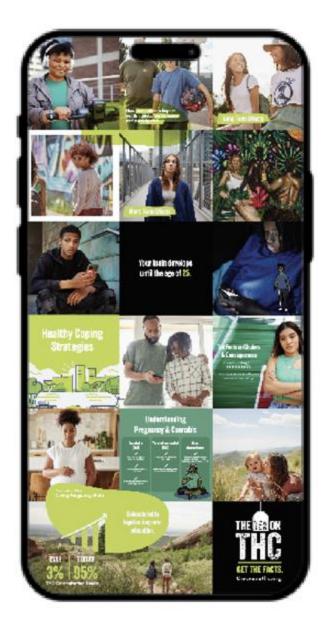






## Social Media & Illustrations





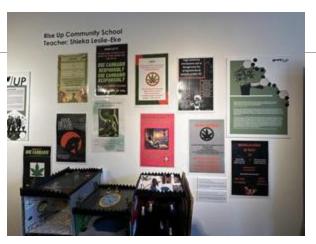




### **Art Exhibitions**





















### **Earned Media**



**Media Metrics** Initium Health Invite: Denver Post Invite: Westword Print Invite: Open Rate: 19.33% Open Rate: 16.49% Size: 1/2H Click Rate: 15.30% Click Through Rate: 2.46% Click Through Rate: 79.13% Print Circulation: 20,000 Flipbook Impressions: 6,094 95% Pick up rate CPR Banners Impressions: 58,167 CTR: 06% Initium Health Closing: Open Rate: 4.5% 1071 pick up locations **Empowering** Click Rate: 13% 200,000 monthly readers Westword Exclusive Invite: Total Delivered: 50,258 Total Opens: 13,553 Click Through Rate: 2.79% Conversations: Initium Health Closing RS: How the Hear/Say Open Rate: 9.21% Open Rate: 26.97% Click Rate: 20% Unique Clicks: 196 **Art Exhibition** Click Through Rate: 2.17% Total Clicks: 577 **Transformed** Perspectives on **Earned Media High Concentration** All Events Frant Porch **Boulder Daily Camera** Colorado Public Radio Patch Denver Cannabis Colorado Community Media Colorado Hometown Nextdoor 5280 The Vamp Deville Your Hub/Denver Post City Spark Visit Deriver Overview 303 Everwondr Magazine Deriverite Eventibrite "Hear/Say," curated by Tya Colorado Parent Fox 31 **Out Front** Anthony, featured innovative works by 11 artists, exploring the science and impact of Guerilla Marketing Locations & Print Media Mailers high-concentration cannabis. Held at BRDG Gallery from June 14 to July 14, and sponsored by the University of Colorado School of Highlands Farmers Market. Denver Central Market Woodward Studios The Green Solution Lohi Residential EQ Creperie & Burger Bar Walker Fine Art Public Health, it aimed to spark Vibe Cafe 15th Velvet Cellar **Best Buds Dispensary** critical conversations and raise Larimer Square **Upstairs Circus** Continuum Art Studios awareness about cannabis use **Dairy Block Market** Spectra Art Space through art. Mcgregor Square Lab Bocce Optique Derwer Blue Tile Gallery Prism Workspace Objective Slice Works The Kitchen To drive attendance to the Central Market Larimer St The Giving Tree Of Denver Hear/Say opening night reception, we launched a targeted social Little Owl Coffee Bindery Cafe Market Little Finch Life Flower Dispensary media campaign, ran banner ads, The Passport Verde Natural sent out email newsletters. Avanti Moda Man Krystaleaves distributed eye-catching posters **Happy Camper** Show Pony Vintage and flyers in key locations, and leveraged earned media efforts. The Post Chicken Mirada Art Gallery Oasis Super Store Simply Pure Maci Cafe Rino Art District Dimestore Delibar Center (Grace) Globeville Riverfront Art Green Dragon Additionally, the exhibition served Denver Vapor Convenience Georgie's HEARISAY as an educational tool to inspire Art Gym Artist On Santa Fe Alma Fonda Fina other artists, educate the 910 Arts community about high-concentration cannabis, and inform the public about the scientific and social implications of its use.

### **Hard Launch Timeline**

### **Proposed Hard Launch Timeline (Subject to change)**

11/13/2024	Podcast: Episodes Published
11/13/2024	YouTube: Videos Published
11/13/2024	Digital Marketing: Organic Social Media
12/??/2024	Press Conference
12/17/2024	Digital Marketing: Paid Social Media
12/17/2024	Digital Marketing: Programmatic Display
12/17/2024	Digital Marketing: Search Engine Marketing
01/02/2024	Podcast: Advertising Promotions
01/14/2025	OOH: Digital OOH / Unique In-Place
01/14/2025	OOH: Traditional Billboards
01/14/2025	Digital Marketing: Streaming Video (OTT)
01/14/2025	Digital Marketing: Streaming Audio

### **Press Conference**

#### Governor's Press Conference Strong as Granite Campaign Launch, National Suicide Prevention Week











### **Go-to-Market Strategy Pre Launch**

#### Phase 1

- Press Kits Preparation (Campaign overview, key statistics about hcc, testimonial videos, website, press release)
- Event Coordination
- Prepare materials for release and approve.
- Launch organic presence.
- Artwork and materials for event.

#### • Phase 2

- Release press release to local outlets.
- Send personalized invitations to key media outlets.
- Linkedin press release out to stakeholders.

### **Go-to-Market Strategy Launch Day**

#### Launch Day: Press Conference

Location: TBDTime: 10 AM

Speakers: Legislative Representative & Dean Bradley

Content:

- Announce the Tea on THC campaign and its objectives.
- Present key statistics on the rise of high-concentration cannabis use.
- Showcase campaign videos and social media content for the public.
- Q&A session with media and audience.

#### Live Broadcast

- Livestream the press conference on social media (YouTube, Facebook, Instagram Live).
- Partner with local TV and radio stations to broadcast highlights.

#### Social Media Push

- Immediately push press conference on CSPH and Teaonthc organic channels.
- Stakeholder collaboration: Coordinate launch day posting of content.

#### • Press Tour Following Conference

Coordination of news outlets to talk on live or pre-recorded channels. (Speakers TBD)

### **Go-to-Market Strategy Post Launch**

#### **Public Relations**

- Follow up with media outlets to ensure maximum coverage in news cycles.
- Pitch feature stories to targeted publications, focusing on personal testimonials, the science of high-concentration THC, and expert opinions.

#### **Ongoing Social Media Engagement**

- Maintain momentum with 3x/week posts on Instagram, Facebook, and YouTube.
- Feature a mix of educational content, user-generated content, and influencer collaborations.

#### **Campaign Continued**

Proceed with launch strategy as previously discussed.

### **Workstream Progress**

### **Year 2 Overview**

Social Media Videography Digital Media Print Media Project Management

Web-Based Curriculum Educator Tools Provider Tools Peer Support Tools

#### **Objectives:**

- (a) Raise awareness of HCC and its impacts on health and mental health especially for youth, pregnant and parenting individuals. These targeted groups may be expanded during the contract.
- (b) Support the development of healthy coping skills and encourage the development of positive strategies to pursue and achieve life goals
- (c) Engage and reach a diverse set of stakeholder groups that can support education on these topics with key audiences.

### **Provider Education**

#### Behavioral Health Integration in Primary Care

• Tea on THC Campaign introduction

#### Provider Resources:

- o DSM-5 Criteria for Cannabis Use Disorder
- High-Risk Groups to Avoid Cannabis Use

#### Continued Efforts & Stakeholders:

- Colorado Hospital Association
- Health System/Physician practices
- Federally Qualified Health Centers/
   Community Health Centers
- Behavioral Health Facilities
- Colorado Association of Healthcare Executives Nov. 13



#### **Letter to Providers & Pin Buttons**

Syphilis cases are surging in Lubbock and nationwide. Lubbock Public Health needs your help with addressing syphilis in our community.

Put a stop to syphilis.

Syphilis often doesn't have symptoms, or symptoms can be easily missed. People don't always seek testing while showing signs recognized to be primary or secondary syphilis. Syphilis can be deadly for adults, but even deadlier for newborns whose mothers were infected with syphilis during their pregnancy and not treated.

In regions with high infection rates like Lubbock, the CDC recommends testing for all sexually active people, especially people aged 15-44.

This Syphilis Toolkit from Lubbock Public Health includes:

- · An "Ask Me About Syphilis" button
- · Posters for both the staff lounge and the waiting room
- · Our "2024 Guidance for Syphilis Screening, Testing, and Treatment" document

The guidance for screening, testing, treating, and reporting syphilis is intended for anyone who needs to understand syphilis testing and the next steps for a patient who tests positive.

Syphilis testing can be complicated, but our enclosed guidance document seeks to make 2024's testing and treatment recommendations easier to use. Recent recommendations for using rapid point-of-care (POC) tests are also discussed. If ordering labs on a patient, please add syphilis testing.

Together, we can put a stop to syphilis!



Waiting Room Poster





After reviewing the 2024 Guidelines for Syphilis Screening, Testing, and Treatment, we would greatly appreciate your feedback.

Please take this survey, administered by 3rd-party consultants at Initium Health, to be entered to win a \$100 gift card. The survey must be completed by the end of day on 11/30/2024 (11:59PM). One winner will be selected to win the gift card, and notified via email.



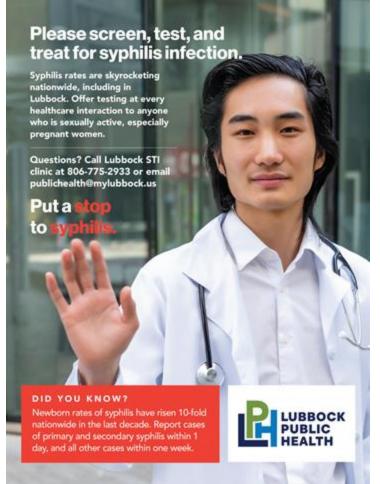


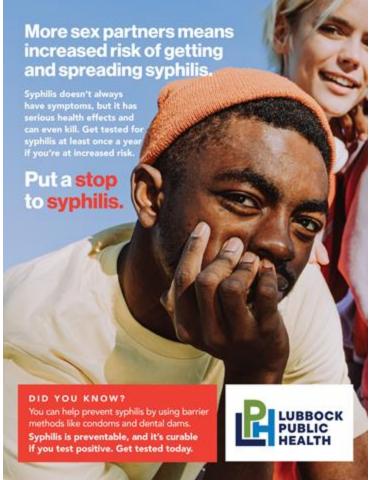


### Putastop to syphilis.



#### **Posters**







### 2024 Guidelines for Syphilis Screening, Testing, and Treatment











2024 GUIDELINES FOR SYPHILIS SCREENING, TESTING, AND TREATMENT

#### Dear Healthcare Community of Lubbock:

Between 2018 and 2022, rates of syphilis increased 648% in Lubbock. Lubbock Public Health and the U.S. Centers for Disease Control and Prevention (CDC) are recommending that all sexually active adults in Lubbock be screened for syphilis. Syphilis can cause blindness, deafness, and damage to almost every organ system, especially the cardiovascular and nervous systems.

Syphilis can kill adults and lead to significant permanent health impacts for both adults and infants. If a pregnant person is infected, the infant has a high chance of being stillborn, of dying near birth, or of having lifelong health problems.

Newborn (aka. congenital) syphilis rates have increased 10-fold nationwide in the last 10 years. In 2022, 25% of the country's newborn syphilis cases came from Texas. We know that it can be challenging to choose and interpret syphilis tests, then to determine treatment options in light of contradictory results, intermittent drug shortages, and penicillin allergies.

Screening, testing, and treatment recommendations for *Treponema pallidum* (syphilis) infections have changed over time, and we want to empower all community health providers in Lubbock to tackle syphilis with current information.

This toolkit is designed to help you find much of the information you need about syphilis screening, testing, treatment, and reporting in one convenient location. This includes recent federal guidance about point-of-care (POC) testing and doxycycline post-exposure prophylaxis ("Doxy PEP").

We urge all providers to SCREEN, TEST, and TREAT for syphilis in every possible healthcare encounter. Clinicians should REPORT cases (and probable cases) of Primary and Secondary syphilis within 1 day to the Health Department, and all other stages of syphilis and newborn (congenital) syphilis within 1 week.

For any questions or comments, please contact the STI department of Lubbock Public Health at 806-775-2933, <u>publichealth@mylubbock.us</u>.

"Berns et al. UT Health Houston: School of Public Health. Congenital Syphilis: A Report to the Texas Research-toPolicy Collaboration Project. Feb 16, 2024. (https://sph.uth.edu/research/centers/ dell/legislative-initiatives/docs/Congenital%20Syphilis022724%20upclate.pdf ).

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2024 GUIDELINES FOR SYPHILIS SCREENING, TESTING, AND TREATMENT

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### **MGMA Conference Highlights**







### **Speaking Engagements**

- **CLIO Event NYC:** Annie spoke at CLIO networking event
- **Region 16 Opioid Abatement Council:** Greg spoke to members of this council in Colorado Springs
- Harvard University: Brandon Lloyd to speak at their Business of Doing Good event on his testimonial





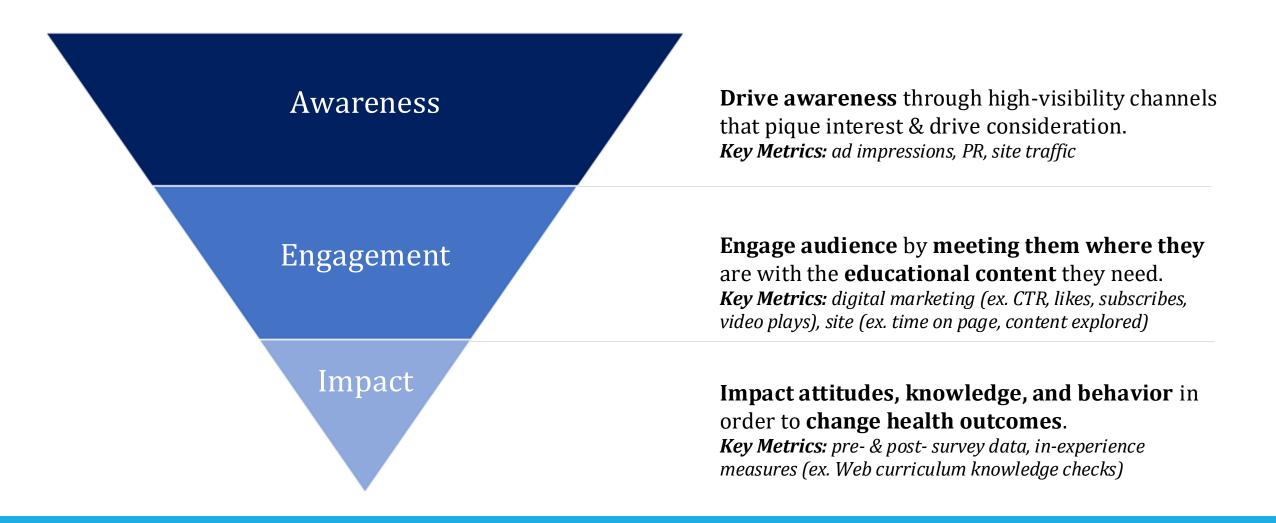


### **Social Media Strategy & Content**

- **Scope:** Expanding reach through influencers and community-driven content
- Goals: Increase engagement, audience growth, and message resonance
- Key Tactics:
  - Influencer partnerships & micro-influencers
  - Culturally relevant, diverse content
  - Ongoing engagement and optimization

### **Success Metrics**

## For "Tea on THC" Campaign, we are monitoring metrics across the funnel & optimizing as the campaign progresses



### **Key Metrics**

### • Key Metrics:

- Reach and Impressions: Measures the number of people exposed to the campaign.
- Engagement Metrics: Shows the depth of audience interaction (e.g., likes, shares, comments).
- Sentiment & Brand Health: Tracks audience perception through sentiment and mentions.

### • Reach & Impressions:

- Total Reach: Unique users who saw the content (indicates visibility).
- Impressions: Total number of content displays (frequency of exposure).
- o Post Reach: Reach of individual posts, useful for comparing content performance.

#### Engagement:

- Likes/Reactions: Initial interest in content.
- o Comments: Shows deeper engagement and conversation.
- Shares/Retweets: Amplifies content to new audiences, extending reach.
- Mentions: Organic reach through user mentions of the campaign.

#### Paid Performance:

- o Impressions & Reach (Paid): Total views and unique audience reach.
- Cost Per Thousand Impressions (CPM): Cost efficiency per 1,000 impressions.
- Frequency: Average number of times each person sees the ad, balancing exposure.

### **SRC Discussion**

Christopher E. Urbina, MD, MPH Chair, HB 21-1317 Scientific Review Council





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## Review of Educational Campaign Evaluation

Annie Collier, PhD, MS Associate Professor, Colorado School of Public Health

Greg Tung, PhD, MPH Associate Professor, Colorado School of Public Health





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### **HB 1317 Evaluation Team**

We are collecting rigorous evaluation metrics across every component of the HB 1317 health education campaign:

- University of Colorado team collects qualitative and quantitative data (e.g., Initium webinars; Colorado HCC Survey; partner project surveys)
- Initium collects additional metrics (e.g., earned media, engagement metrics, website traffic how people look at website)

We want to ensure that decisions about the educational campaign are data driven and inform every aspect of our activities

You will see that our results support our approach, i.e., to increase knowledge about high concentration cannabis (HCC) in youth, young adults, and pregnant and parenting people, and to emphasize reliance on positive psychological approaches

## Today, we will briefly review the evaluation metrics collected during 2023 - 2024:

- 1. Colorado HCC survey
- 2. Hear/Say and Grow Up art exhibitions
- 3. Motivational Interviewing Training
- 4. Oasis UNC partnership

## 1. Colorado HCC Survey

# What are high concentration cannabis (HCC) use patterns across Colorado, and what do people know about coping alternatives?

Where are we starting: Information to serve as a baseline prior to the media launch

Collected in collaboration with Initium via CINT. CINT is a survey panel marketplace for researchers that manages participant pool selection, verification/validation tools, incentives, etc.

	Desired Sample	Actual Sample
Living in Colorado	100%	100%
Young Adult (ages 18-24)	25%	19%
Pregnant or recently postpartum	10%	9%
Parents of children ages 11-17	25%	17%

## **Highlights of Findings**

Age mean age = 41.4 years (18-25 years = 19%; 26+ years of age = 81%)

Gender 45% male

Users 42% were current users (past 30 days)<sup>1</sup>

14% of the 235 "current users" were either pregnant or had a child < 2 yrs

54.4% of the "non-current users" had consumed cannabis before

Thus, 74% of the sample had used cannabis before<sup>2</sup>

Rurality 36.5% urban, 46.5% suburban, 13.7% rural

Education 28% high school education or lower

Parents 58% had children; 9% had children under 2; 24% had children 3 to 10; had children between ages of 11-17; 24% had children 18+

<sup>&</sup>lt;sup>1, 2</sup> Higher use in CO sample than general adult population (49 % lifetime, 14% past 30 days, NSDUH)

### **Current Users Are Statistically Different than Non-Users in the Following Ways:**

Younger

More likely to be male

More likely to be gay

More likely to live in urban settings

Trend towards being less educated and having lower rates of health insurance

No significant differences in race, Latina/o/x ethnicity, pregnancy, children <2,

Table 1. Demographic Characteristics

	Full Sample (n=564)		Current Us	Current Users (n=235)		Non-Current Users (n=329)	
	μ	%/SD	μ	%/SD	μ	%/SD	Sig.
Age	41.0	16.0	38.7	13.2	42.7	17.6	.004
Gender							.003
Man		45.4		54.5		38.9	
Woman		53.7		44.7		60.2	
Another not listed here		0.9		0.9		0.9	
Pregnant?		6.6		6.8		6.4	.848
Children ≤2?		9.0		9.8		8.5	.899
Latina/o/x/Hispanic?		32.9		31.6		33.7	.599
Race							.601
White		60.7		61.3		60.4	
Black		14.6		15.7		13.7	
African American		4.6		4.7		4.6	
American Indian or Alaska Native		8.0		8.1		7.9	
Asian		3.4		1.7		4.6	
Native Hawaiian/Pacific Islander		2.0		1.3		2.4	
Prefer not to say		0.5		0.9		0.3	
Another not listed here		6.2		6.4		6.1	
Sexual Orientation							.022
Gay		2.8		4.3		1.8	
Lesbian		2.3		2.1		2.4	
Straight		80.8		76.2		84.1	
Bisexual		10.8		14.9		7.9	
Another		1.8		2.1		1.5	
Prefer not to say		1.4		0.4		2.1	
Rurality							<.001
Urban		36.5		46.4		29.5	
Suburban		46.5		39.6		51.4	
Rural		13.7		11.1		15.5	
Not sure		3.4		3.0		3.6	
Education							.073
<high school<="" td=""><td></td><td>3.7</td><td></td><td>3.8</td><td></td><td>3.6</td><td></td></high>		3.7		3.8		3.6	
High School Degree/GED		24.3		27.2		22.2	
Some College/Associates		39.2		37.9		40.1	
Bachelors Degree		22.0		24.3		20.4	
Graduate Degree		10.8		6.8		13.7	
Have Health Insurance?		91.8		89.4		93.6	.069

### **Comparing Users to Non-Users:**

Non-users have significantly more confidence in refusing, choosing other options, and communicating about HCC concerns with others

Users that are younger (25 and under) have less confidence in refusing and choosing other options than people 26 years and older

### Cannabis Use Questions: Current Users vs. Non-Current Users

	Full Sample (n=564) Current Users (n=235)		nors (n=225)	Non-Current Users (n=329)			
			Current Osers (II=255)				
	μ	%/SD	μ	%/SD	μ	%/SD	Sig.
Confidence in refusing HCC (1=not confident, 5=very confident)	4.1	1.2	3.7	1.3	4.5	1.0	<.001
Confidence in choosing other option (1=not confident, 5=very confident)	4.2	1.2	3.9	1.2	4.4	1.1	<.001
Confidence in talking to others about HCC (1=not confident, 5=very confident)	3.6	1.2	3.6	1.2	3.6	1.2	.714
Likely to talk to others about HCC (1=ext unlikely, 5=ext likely)	3.4	1.2	3.3	1.2	3.4	1.3	.830
Importance that others know about HCC (1=not imp., 5=ext imp)	3.9	1.1	3.7	1.1	4.0	1.1	<.001

### Cannabis Knowledge

*Users* know significantly more about concentrate products than non-users

*Non-users* know significantly more about health consequences of HCC than non-users

*Users* recognize significantly fewer healthy coping mechanisms for stress than non-users (meditation, connecting to nature, spending time with family and friends, the importance of good sleep habits)

### **Deeper dive:**

Females know significantly more about HCC health harms than males

Pregnant people/children < 2 know significantly less than the rest of the sample about health consequences of HCC

Knowledge does not differ by age

### Cannabis Use Questions In Current Cannabis Users (43% of full sample or n = 235)\*

		%/SD
Which products have you used?		
Edibles or drinks		37.4
Concentrates		47.2
Flower		<b>67.7</b>
Other products		9.4
n last 30 days, how many days have you used:		
Edibles or drinks	8.1	8.8
Concentrates	12.0	9.9
Flower	14.9	10.1
Other products	8.8	9.8
Do you want to decrease cannabis use? (yes)		36.7
Likelihood of cannabis free in next 30 days? (1=ext unlikely, 5=ext likely)	2.8	1.6
ikelihood of decreased cannabis use in next 30 days? (0=ext unlikely, 10=ext likely)	3.9	3.6
Belief have skills to decrease cannabis use? (0=ext unlikely, 10=ext likely)	6.6	3.1
Confidence about making this change? (0=ext unlikely, 10=ext likely)	6.0	3.3

36.7% of the current users want to decrease cannabis use Users consume close to 50% each month

**Comparing HCC Knowledge in Current Users and Non-Current Users- Percent Correct** 

	Full Sample (n=564)	Current Users (n=235)	Non-Current Users (n=329)	
	\(\frac{\(\mathref{\text{(N-233)}}}{\%/\text{SD}}\)		%/SD	Sig.
How much THC is in each of these products?	707.52	70782	70722	
Cannabis flower	57.2	59.3	55.7	.391
Concentrates	63.4	71.7	57.6	<.001
Edibles or drinks	56.4	59.3	54.4	.257
Which of the following have high concentrations of THC?	60.4	57.3	62.6	.201
Which of the following influence how high someone gets?	67.7	60.0	73.2	<.001
Which of the following are impacts of youth using HCC?	32.4	29.2	34.7	<.001
Which of the following are impacts from pregnant people who use cannabis?	68.8	57.4	76.9	<.001
Is cannabis harmful for: - Youth brain development?	80.4	71.2	86.9	<.001
Is cannabis harmful for: - Pregnant people and their fetus?	83.4	72.1	91.4	<.001
True or False? As concentrations of THC increase, the harms are likely to increase	82.2	72.6	89.1	<.001
Based on what is known about harms, who should avoid using recreational cannabis?	73.5	59.0	83.9	<.001
Which of the following are healthy ways to cope with stress?				
Meditation/deep breathing	78.9	74.9	81.8	.049
Taking anger out on others	92.9	90.6	94.5	.076
Alcohol or drugs	94.7	92.8	96.0	.087
Exercising	85.1	84.3	85.7	.631
Connection to nature	72.9	66.0	77.8	.002
Having good sleep habits	77.5	72.1	82.1	.002
Spending time with friends family	73.2	66.0	78.4	<.001

## 2. Hear/Say and Grow Up Art Exhibitions

Led by Dr. Annie Collier

## Highlights of Art Exhibition Findings

### **Patrons:**

Attendees were predominantly female, 32% Latina/o/x, urban/suburban, and higher educated

Self-report of knowledge significantly different pre to post across each exhibition, but greater changes seen across Hear/Say exhibition patrons

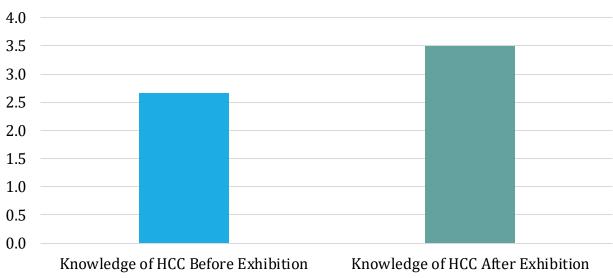
When knowledge scores were compared to the CINT findings, art patrons had greater knowledge of products and health effects than the general Colorado sample

### **Artists:**

Predominantly female, multiple different races, highly educated

Reported significantly greater changes in knowledge before and after experience

### Patron HCC Knowledge Before and After Exhibition-Combined Exhibitions

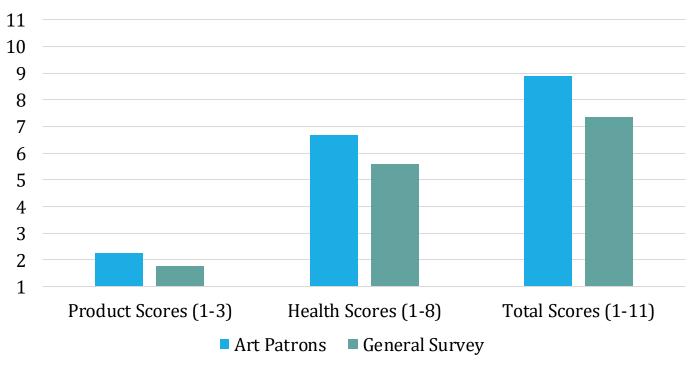


p<.001; n=78

Patron vs. General Survey HCC Scores

	Art Patrons	General Survey	Sig.
Product Scores (1-3)	2.2466	1.7589	<.001
Health Scores (1-8)	6.6892	5.5887	<.001
Total Scores (1-11)	8.9054	7.3351	<.001

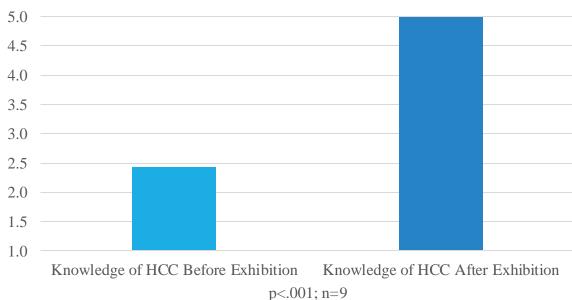
Patron vs. General Survey HCC Knowledge Scores



## Artists Self-Report of HCC Knowledge

Knowledge of HCC Before Exhibition	2.4
Knowledge of HCC After Exhibition	5.0





# 3. Motivational Interviewing (MI) Training

Coordinated by Erin Martinez, Patient Navigation & Community Health Worker Training, University of Colorado, Anschutz Medical Campus

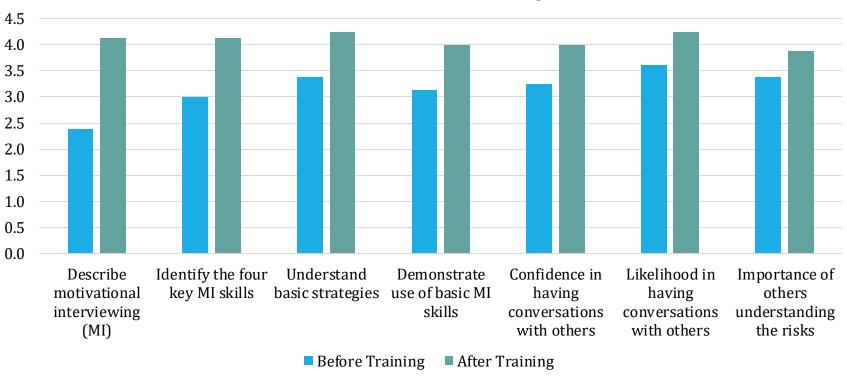
### MI Highlights

Very diverse sample, with 63% Latina/o/x and 38% African American/Black; most lived in urban settings; average age was 26 years

Majority indicated they were moderately likely (43%) or highly likely (57%) to apply what they learned and very likely to recommend the workshop to others (average was 8.3, range 1 to 10)

Reported that after attending a 2-hour training, they understood the basic ideas behind MI and how to apply it

#### Before and After MI Training



## 4. UNC Oasis Event

Led by Dr. Dannon Cox, Colorado School of Public Health, Northern Colorado University

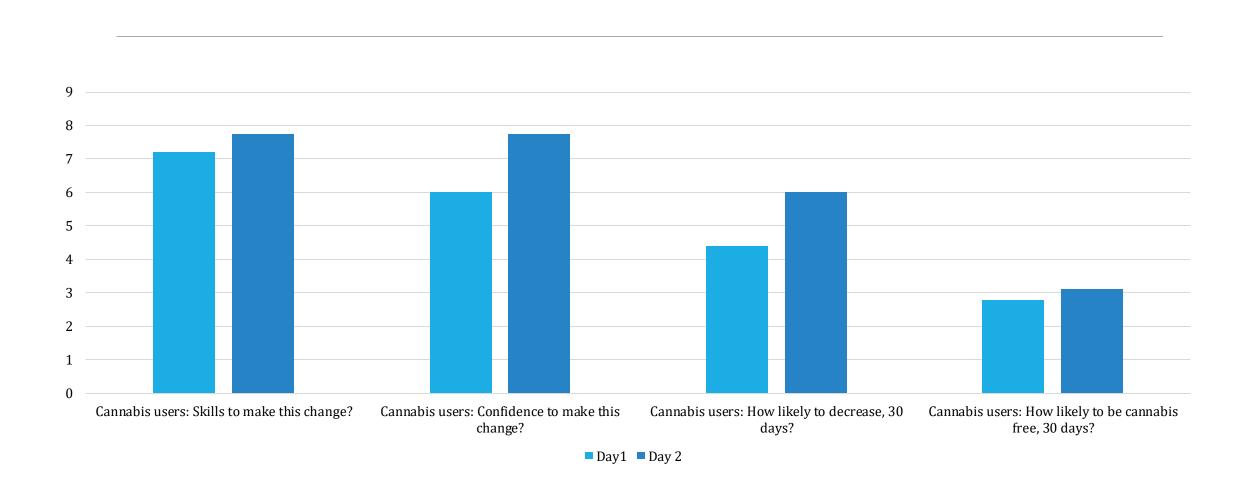
### **Highlights of Oasis Event**

Held at UNC and attended by predominantly female, White, non-Hispanic, college students

After 2-day event, attendees had greater confidence in decreasing their HCC usage and said they were more likely to decrease their usage in the next 30 days

No change in confidence about remaining cannabis-free after 30 days

### OASIS Cannabis Users Pre and Post



### **Summary of Findings**

### In this Colorado sample, users:

- Higher use than NSUDH
- Participants younger, more likely to be male, gay, live in urban and suburban settings, and trended towards being less educated and having less health insurance
- Knew more about the product, less about the health ill effects of HCC and alternative coping mechanisms
- Younger users had less confidence in refusing and choosing other options than older users
- Approximately 36% wanted to decrease their use; used about half of the month and predominantly flower, followed by high concentrates

Non-users had significantly more confidence in refusing cannabis, choosing other options, and communicating about HCC concerns to others than users

Simple interventions designed to teach people about the harms of HCC (e.g., art exhibition, OASIS) and how to talk to others about HCC (MI training) showed notable changes in knowledge, increased confidence and skills in making changes to cut back, as well as increased confidence in having conversations with others about HCC

## **Evaluation Data Supports the Approach of the Health Education Campaign**

- 1. Focusing on youth and young adults under 25 years of age, pregnant, and parenting people
- 2. Educating people about the harms associated with HCC
- 3. Providing skills to have discussions about cannabis use
- 4. Teaching people about positive alternatives to cannabis use
- 5. Ensuring that materials reach urban/suburban, male, and gay populations

### Final Considerations.....

Harm reduction approaches for young adults who use cannabis may be warranted:

- Many want to cut back, but may not have the skills or confidence to do so
- Many do not appear to have knowledge about the potential harms associated with HCC, or positive alternatives

Continued evaluation of the health education campaign will continue to provide us with feedback about what is working and what needs to be modified and/or added. We will rely on an iterative approach.

### **SRC Discussion**

Christopher E. Urbina, MD, MPH Chair, HB 21-1317 Scientific Review Council





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## Next Steps & Closing Remarks

Ionathan Samet, MD, MS Professor & Former Dean, Colorado School of Public Health

> Christopher E. Urbina, MD, MPH Chair, HB 21-1317 Scientific Review Council







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