



NATIONAL ASSOCIATION OF  
Community Health Centers®

# Tackling Substance Use in Health Centers: Crystal Meth and HIV

Thursday, June 1, 2023



# NACHC's STRATEGIC PILLARS

1



## Equity and Social Justice

Center everything we do in a renewed commitment to equity and social justice

2



## Empowered Infrastructure

Strengthen and reinforce the infrastructure for leading and coordinating the Community Health Center movement, notably consumer boards and NACHC itself

3



## Skilled and Mission-driven Workforce

Develop a highly skilled, adaptive, and mission-driven workforce reflecting the communities served

4



## Reliable and Sustainable Funding

Secure reliable and sustainable funding to meet increasing demands for Community Health Center services

5



## Improved Care Models

Update and improve care models to meet the evolving needs of the communities served

6



## Supportive Partnerships

Cultivate new and strengthen existing mutually beneficial partnerships to advance the shared mission of improving community health

To learn more about NACHC's Strategic Pillars visit <https://www.nachc.org/about/about-nachc/>

# THE NACHC MISSION

## America's Voice for Community Health Care

The National Association of Community Health Centers (NACHC) was founded in 1971 to promote efficient, high quality, comprehensive health care that is accessible, culturally and linguistically competent, community directed, and patient centered for all.



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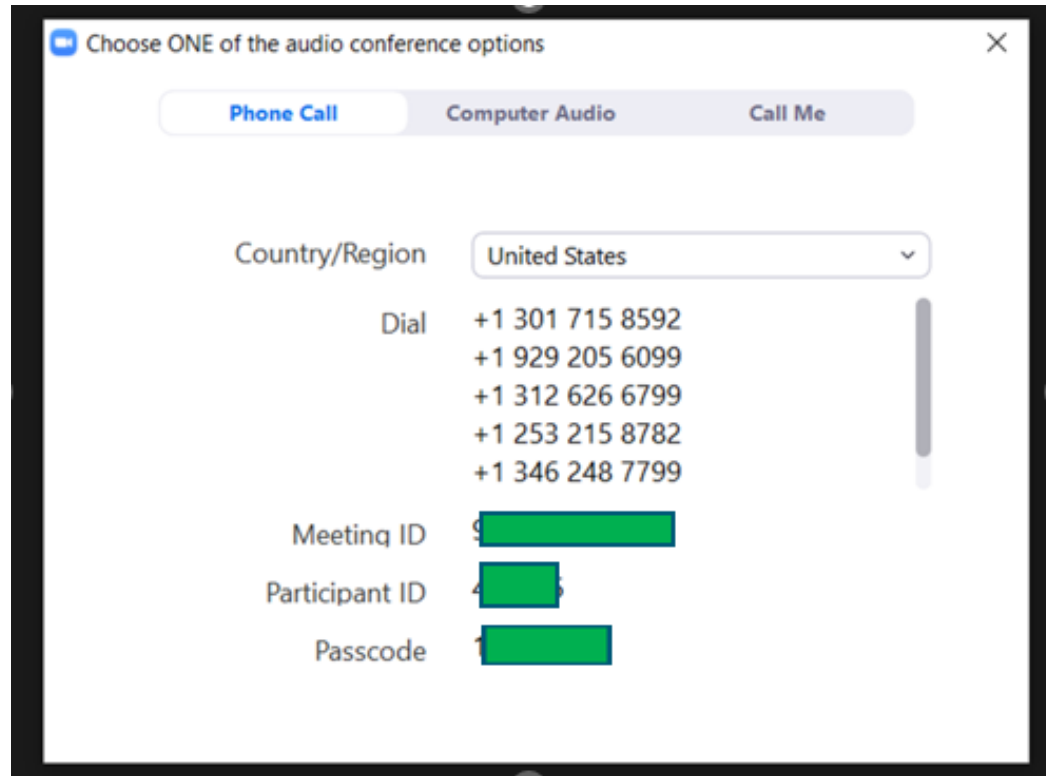


*\*Content shared today is the viewpoint of presenters and may not fully reflect the opinions of NACHC.*

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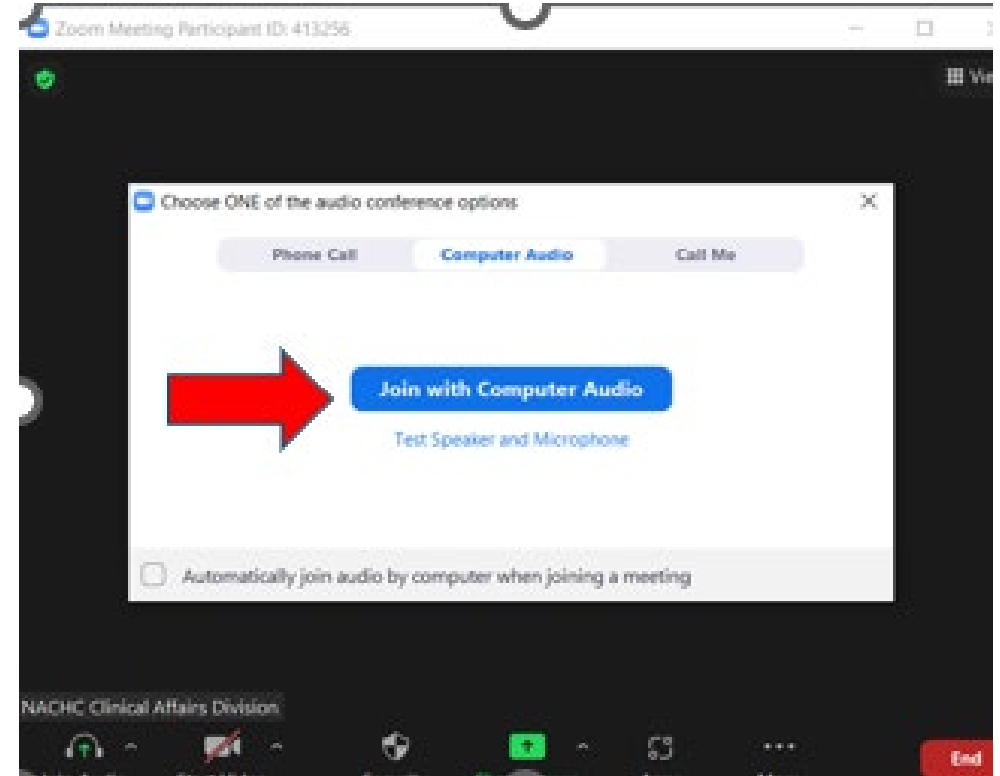
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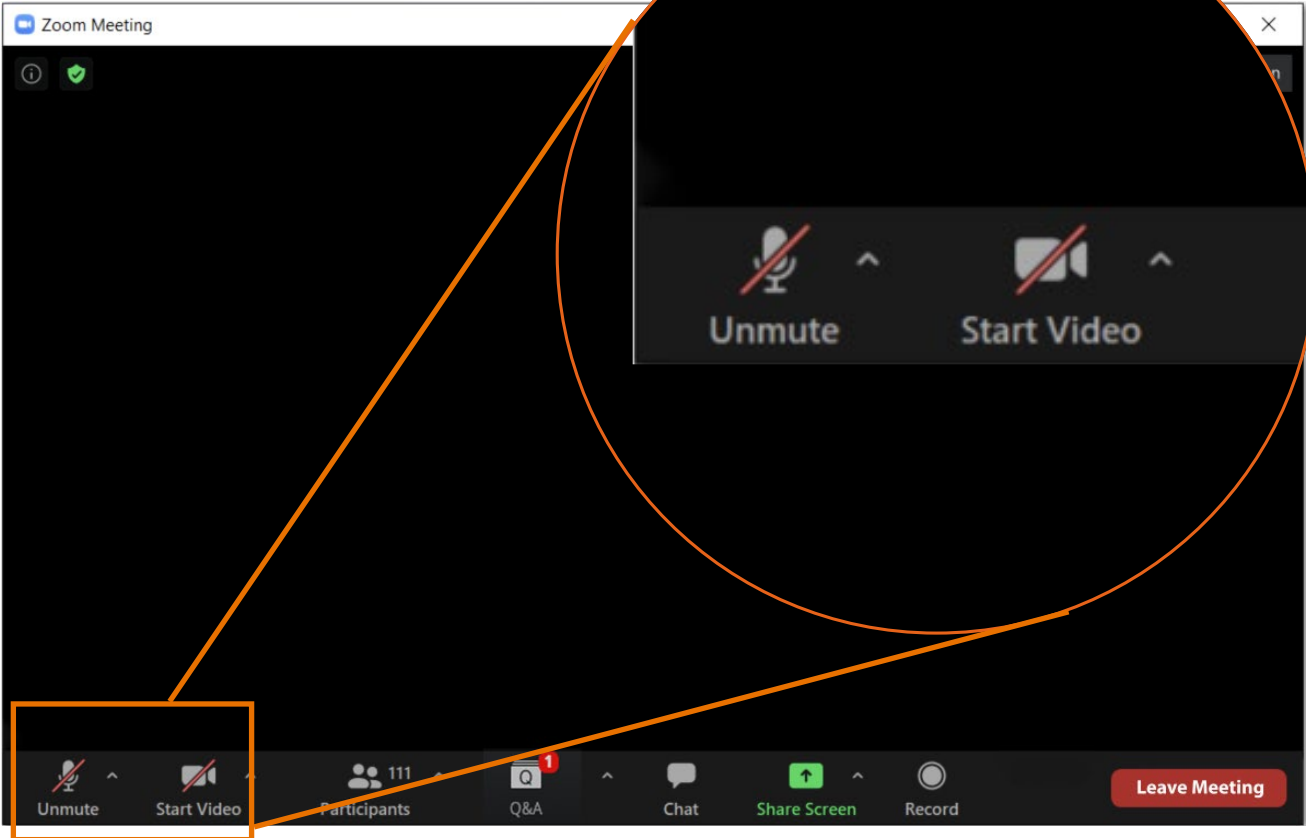


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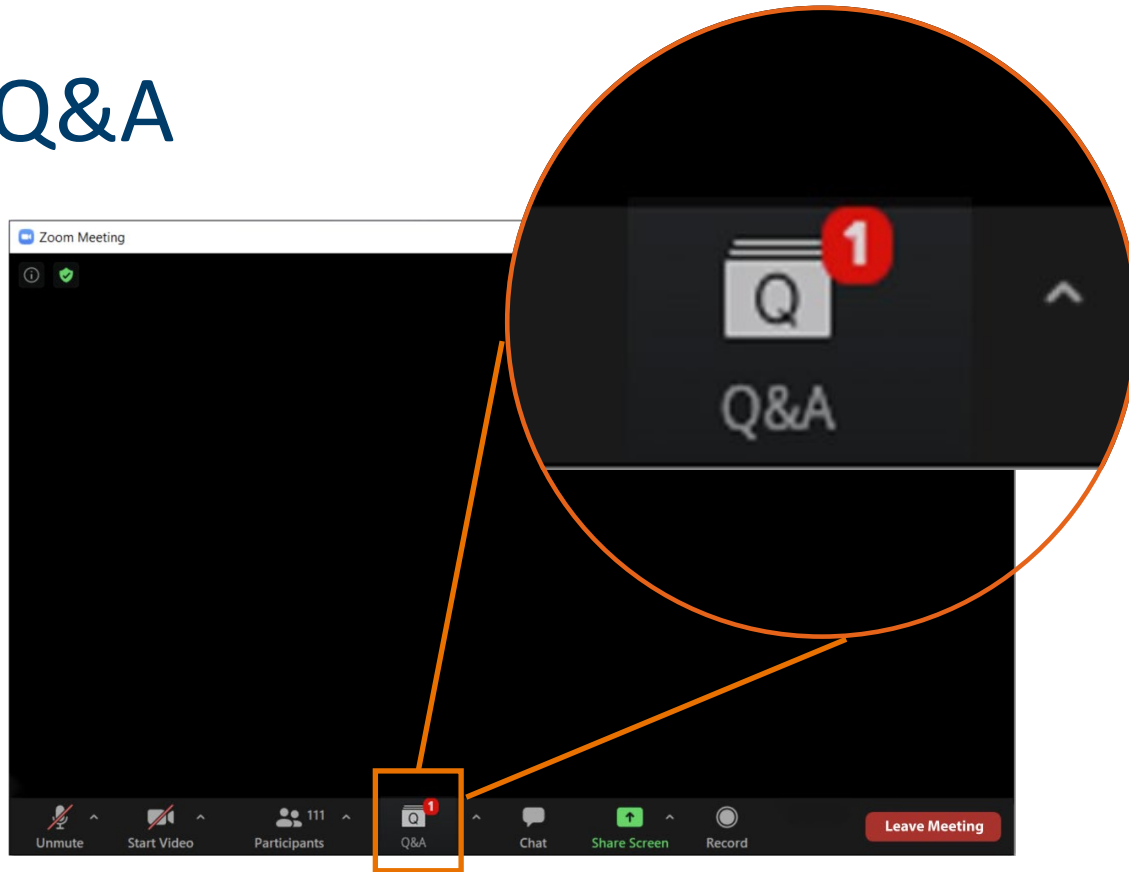


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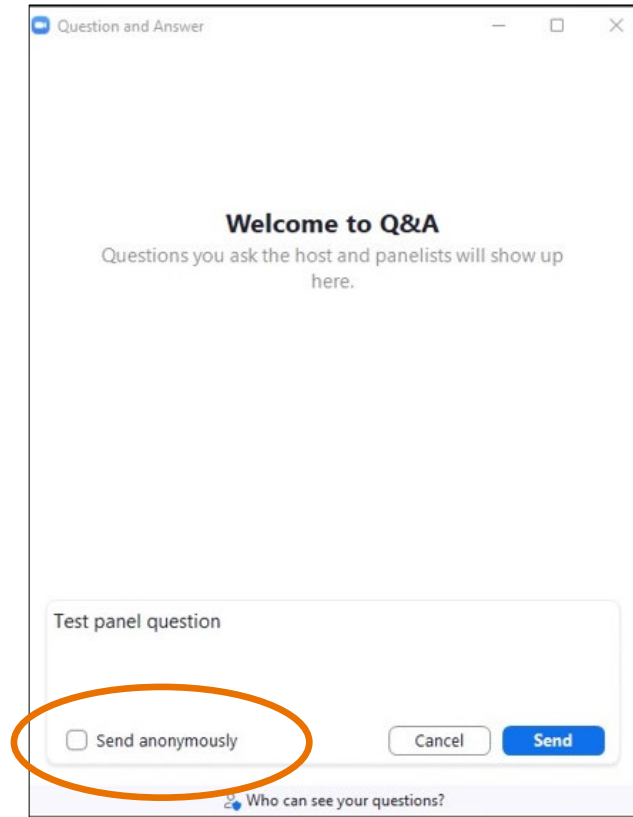


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To ask a question or make a comment, please use the Q&A box, then click "Send".



Select **Send Anonymously** if you do not want your name attached to your question in the Q&A.

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We encourage you to submit your questions and comments at any time in the **Q&A BOX**.

Moderators and presenters will respond to questions as they can.



# MEET OUR SPEAKERS



**Adam Carrico, PhD**



**Alex Keuroghlian, MD, MPH**

# Targeting the Intertwining Epidemics of Meth Use and HIV



**Adam W. Carrico, PhD**  
Professor of Public Health, University of Miami

# Meth is Back

- Resurgent meth epidemic in NYC
  - Declined among White SMM
  - Increased among Black and Latino SMM
- Meth exposure risk through sexual and romantic partners on geo-social networking apps
- Meth users accounted for **one-in-three** new HIV infections in T5K
- Important gaps exist in research examining neuroimmune mechanisms linking meth and HIV

PnP

High Fun

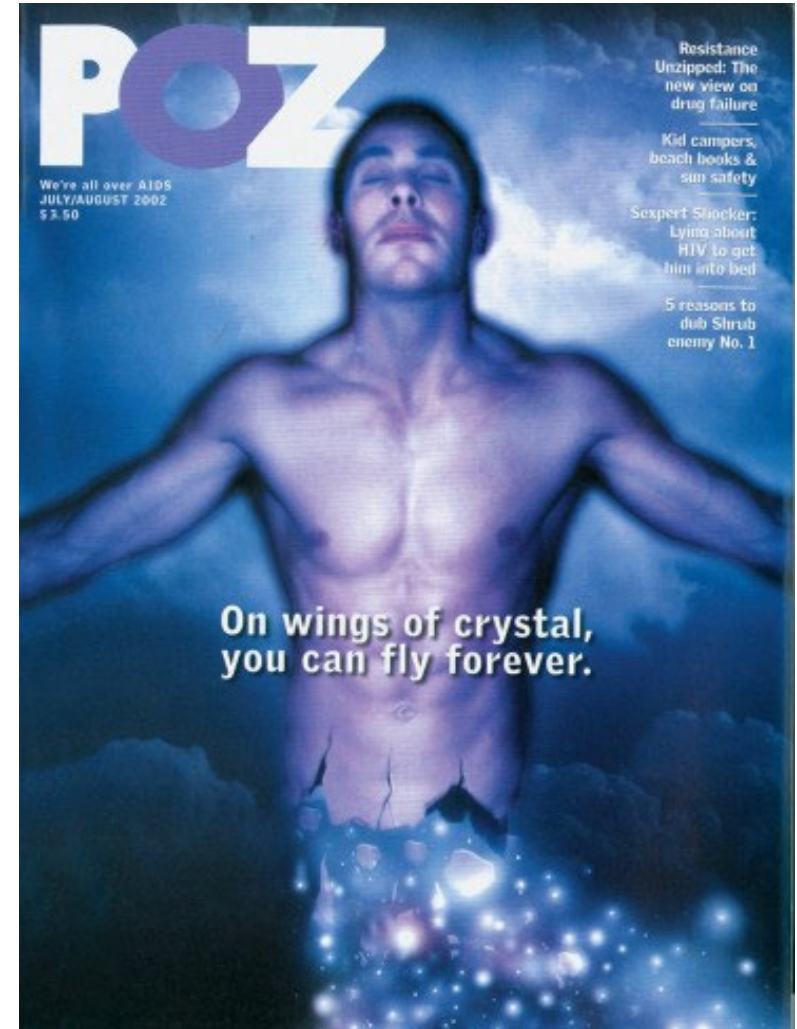
ParTy

Slam



# Pharmacotherapies for MUD

- There is **no FDA-approved pharmacotherapy** for stimulant use disorders
- RCTs of promising pharmacotherapies:
  - 1) Mirtazapine
  - 2) Bupropion with Injectable Naltrexone
- Some RCTs included extensive counseling
- Adherence remains a concern
- Reductions in stimulant use are **modest**



# Behavioral Therapies

- Behavioral therapies should be considered **first line treatments** for meth use disorder (MUD).
- Evidence is strongest for:
  - 1) Contingency Management (CM)
  - 2) Motivational Interviewing (MI)
  - 3) Cognitive-Behavioral Therapy (CBT)
- The Matrix Model - Comprehensive, CBT treatment that has been adapted for sexual minority men.
- These interventions have been successfully implemented from a **harm reduction perspective**.

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## Community-Based Harm Reduction Substance Abuse Treatment with Methamphetamine-Using Men Who Have Sex with Men

Adam W. Carrico, Annesa Flentje, Valerie A. Gruber,  
William J. Woods, Michael V. Discepola, Samantha E. Dilworth,  
Torsten B. Neilands, Jennifer Jain, and Michael D. Siever

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## Optimizing Contingency Management With Methamphetamine-Using Men Who Have Sex With Men

Walter Gómez, *University of California, Berkeley*  
David Olem, *University of California, San Francisco*  
Rick Andrews and Michael V. Discepola, *San Francisco AIDS Foundation*  
Patricia Ambrose and Samantha E. Dilworth, *University of California, San Francisco*  
Adam W. Carrico, *University of Miami School of Medicine*

STONEWALL  
PROJECT



# Not Just the Needle: Comprehensive Interventions

- The literature on interventions targeting the biomedical HIV prevention is nascent
- Consists largely of formative research as well as feasibility and acceptability studies
- Many trials are underway that:
  - 1) Expand access (e.g., Mobile Unit)
  - 2) Deliver SUD, MH, and HCV treatment
  - 3) Adapt evidence-based behavioral approaches

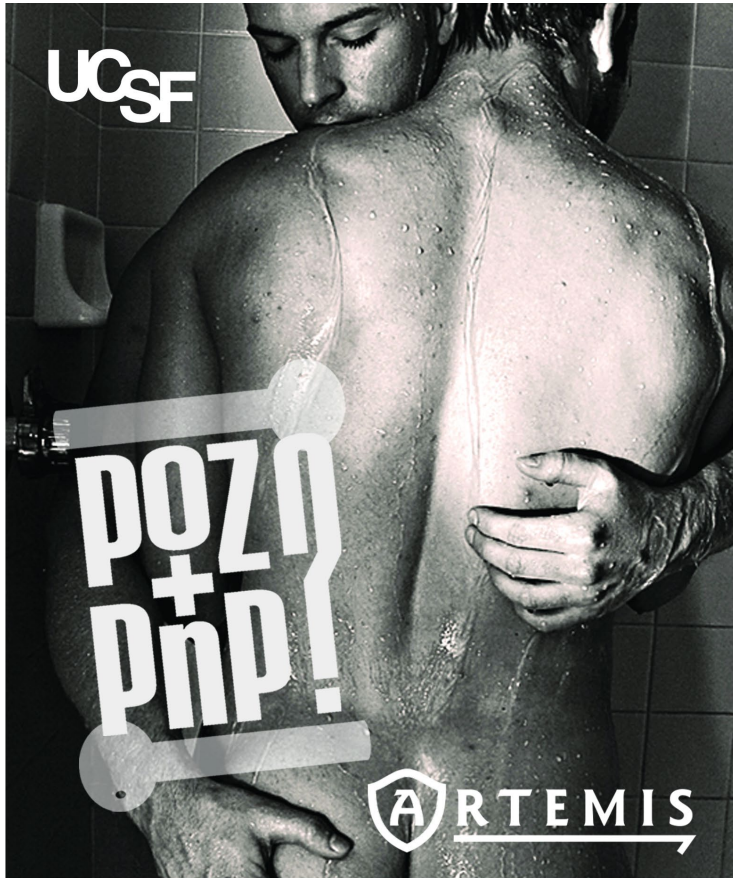
## PRINCIPLES OF HARM REDUCTION



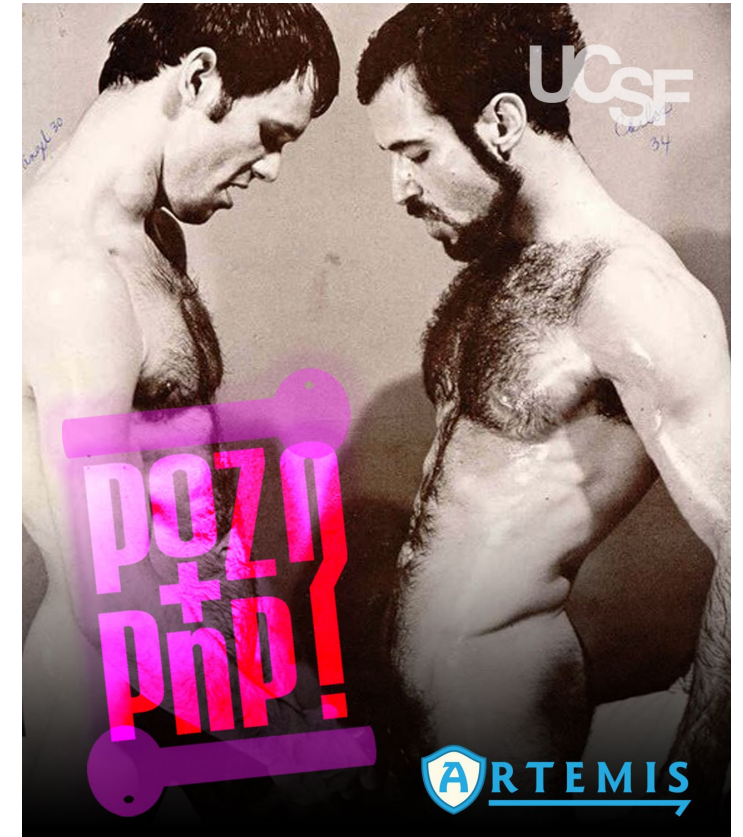
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# ARTEMIS (2013-2018)



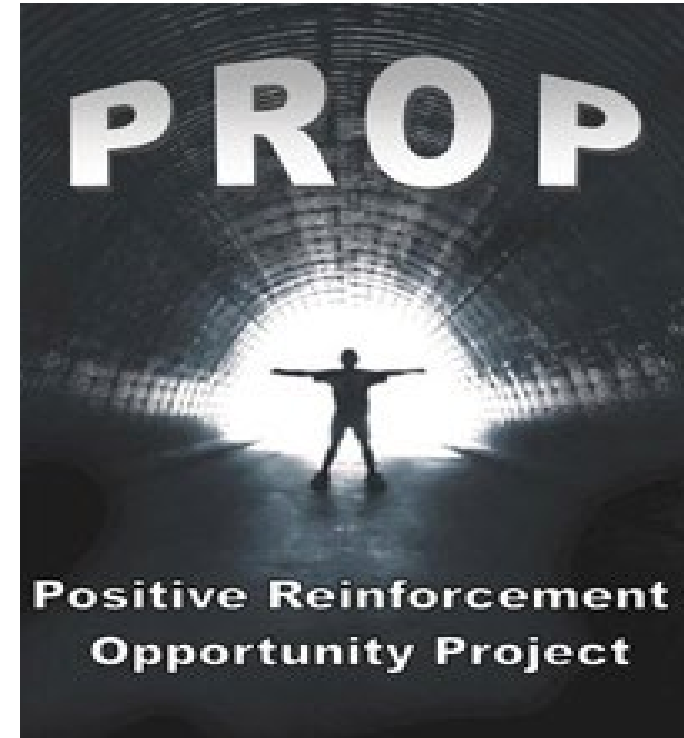
To learn more about this UCSF study,  
contact **415-632-5015**.  
You will be reimbursed for your time  
if you are eligible to participate.



You HIV+? Like to party?

# Contingency Management (CM)

- CM provides tangible incentives as positive reinforcement for behavior change
- CM achieves moderate reductions in stimulant use (Cohen's  $d = 0.66$ )
- RCTs also provide evidence that CM can achieve short-term reductions in VL
- An enduring concern is how to best **boost and extend the benefits of CM**





# Positive Affect

**Two key neurobehavioral processes** could undermine the benefits of CM:

- Withdrawal
- Hypo-responsivity to Reward (Anhedonia)

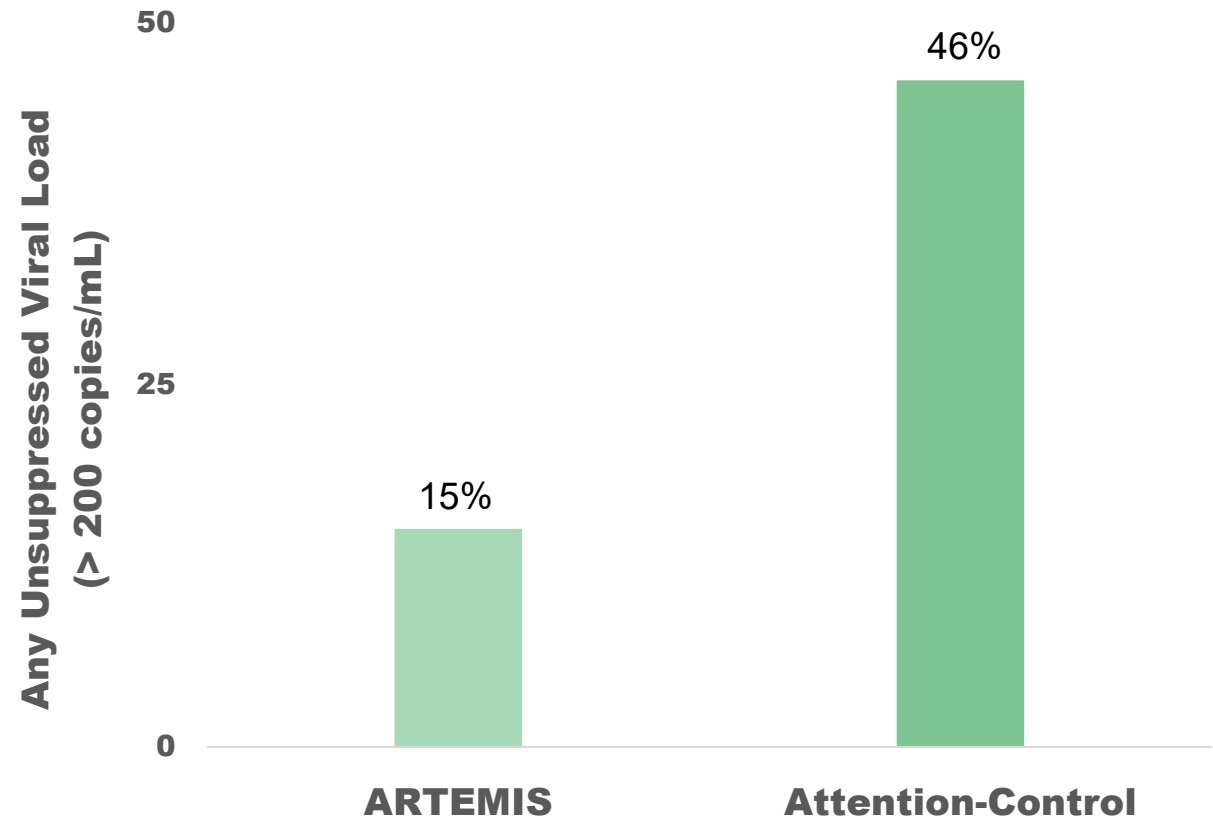
Positive affect interventions could address these processes that maintain SUD

In our prior RCT, a positive affect intervention reduced distress and antidepressant use in PLWH



# Durable and Clinically VL Reductions

- RCT of a positive affect intervention
- Delivered during 12-weeks of community-based CM
- Enrolled 110 HIV+ sexual minority men with confirmed methamphetamine use
- 14% had unsuppressed viral load viral load (> 200 copies/mL) at baseline



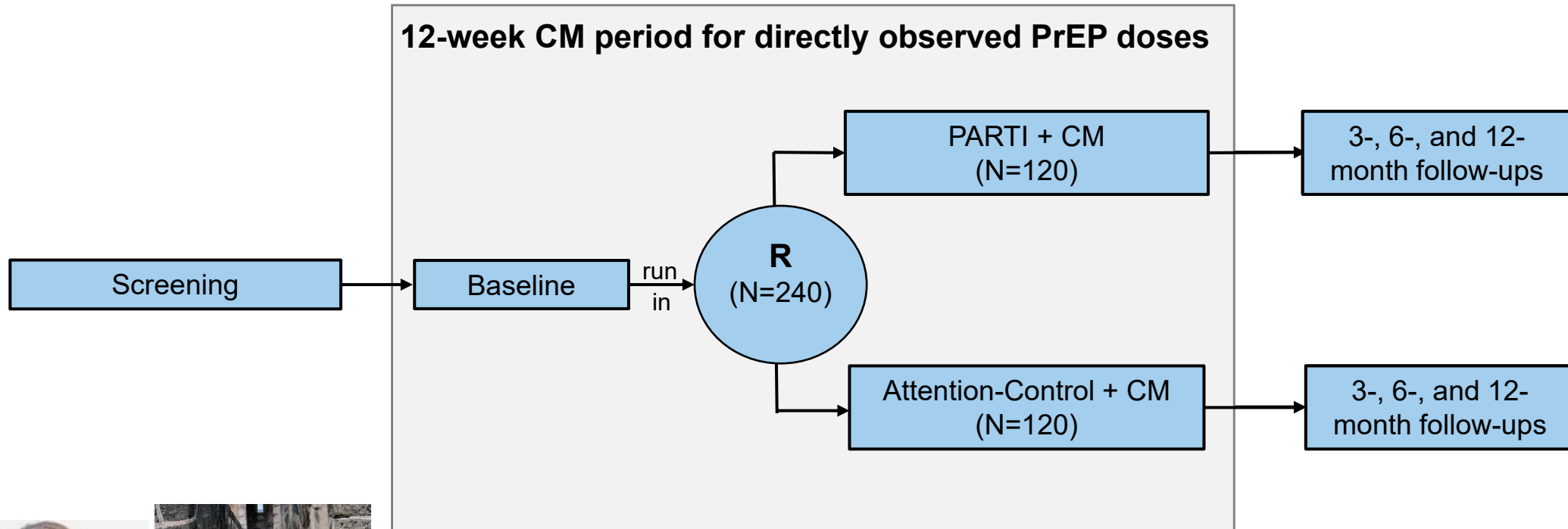
RR = 0.33 (0.15-0.69); p < 0.001

# START: Stimulant-Using SMM and ART Adherence

- START mHealth App integrates:
  - Positive affect skills
  - Self-Monitoring
- Participants provide DBS over 12 months to measure viral load as the primary outcome



# PARTI: Supporting PrEP Adherence in Stimulant-Using SMM



[www.partistudy.ucsf.edu](http://www.partistudy.ucsf.edu)



# Acknowledgements

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CHARM (P30-MH116867; Safren, PI)

## Community Partners



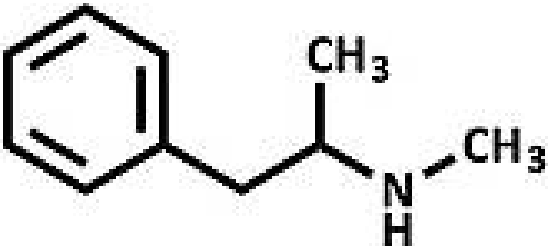
## Key Mentors

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## Other Key Collaborators

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Margie Roach, PhD (University of Miami)  
Monica Gandhi, MD (UCSF)  
Daniel Feaster, PhD (University of Miami)

# Questions?



Like a hurricane, crystal meth affects communities -- not just individuals. How are we taking care of each other?

## HURRICANE TINA


For help with substance use or mental health problems call 1-800-Lifenet / 1-800-543-3638, Ayudese 1-877-298-3373, or Asian Lifenet 1-877-990-8585. For more information about Crystal Meth, HIV testing and other services please call the GMHC hotline at 1-800-243-7692.

the institute **GMHC**   **POCC**

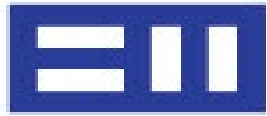
**CRYSTALCLEAR.MN.ORG**  
Crystal meth info, resources and support for gay and bi guys



### SAFER CHEMS



# SAFER CHEMS



NATIONAL LGBTQIA+ HEALTH  
EDUCATION CENTER

A PROGRAM OF THE FENWAY INSTITUTE

# Addressing Methamphetamine Use Disorders at Health Centers

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Alex S. Keuroghlian, MD, MPH

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Associate Chief, Public and Community Psychiatry, MGH Department of Psychiatry

Associate Professor of Psychiatry, Harvard Medical School

Principal Investigator, National LGBTQIA+ Health Education Center at The Fenway Institute

# Continuing Medical Education Disclosure

- Program Faculty: Alex S. Keuroghlian, MD, MPH;
- Current Position: Michele and Howard J Kessler Chair and Director, Division of Public and Community Psychiatry at Massachusetts General Hospital; Director, Division of Education and Training at The Fenway Institute; Associate Professor of Psychiatry, Harvard Medical School
- Disclosure: Royalties as editor of McGraw-Hill Education textbook on transgender and gender diverse health care.



# Fenway's Roots

## Fenway Health

- Independent 501(c)(3) FQHC
- Founded 1971
- Mission: To enhance the wellbeing of the LGBTQIA+ community as well as people in our neighborhoods and beyond through access to the highest quality health care, education, research, and advocacy
- Integrated primary care model, including HIV and transgender health services

## The Fenway Institute

- Research, Education, Policy



# LGBTQIA+ Education and Training

The National LGBTQIA+ Health Education Center offers educational programs, resources, and consultation to health care organizations with the goal of providing affirmative, high quality, cost-effective health care for lesbian, gay, bisexual, transgender, queer, intersex, asexual, and all sexual and gender minority (LGBTQIA+) people.

- Training and Technical Assistance
- Grand Rounds
- Online Learning
  - Webinars, Learning Modules
  - CE, and HEI Credit
- ECHO Programs
- Resources and Publications

[www.lgbtqiahealtheducation.org](http://www.lgbtqiahealtheducation.org)



**Creating a Transgender Health Program  
at Your Health Center:**

From Planning to Implementation

SEPTEMBER 2018

# What is Crystal Meth?

- Methamphetamine
- Looks like rock candy
- Snorting: “rush” effect lasts 3-5 minutes
- Injecting: “rush” effect lasts 5-10 minutes
- Swallowing: “rush” effect up to 30 minutes
- Rectal: Variable duration of “rush”
- Intoxication or “high” lasts 4-16 hours

# The Rush

- Caused by a massive release of norepinephrine, dopamine and serotonin
- Increases release of dopamine in nucleus accumbens, which is part of the reward center in the brain
- Increases heart rate, blood pressure, body temperature

# Cost

- Many people do not have to pay, often freely available at a party
- Can also be exchanged for sex
- Can be sold in smaller amounts, lowest about \$20
- The financial toll is related to impaired judgement and loss of job rather than cost of drug itself

# Crystal Meth Use Among Men Who Have Sex with Men (MSM)

- 10x more use among MSM than general population; annual prevalence 12-30% among MSM
- Increased pleasure from sex
- At one circuit party, 43% reported meth use
- Loss of inhibition
- Weight loss
- Alertness
- Issues of aging in the community

# Crystal Meth and Sexual Activity

- Sex lasts longer, with delay in ejaculation
- Can cause erectile dysfunction, increased sildenafil use
- Disinhibition leads to rougher sex, more rectal trauma and trauma to penis
- Multiple partners
- More condomless intercourse

# Why Crystal Meth at 60 Years Old?

- “It’s the best sex I ever had.”
- “I’m not old and invisible.”
- “I love my partner, but we met when shoulder pads were in style.”
- “Younger guys are interested in me, I know it’s the drugs but when you’re high it feels real.”



# Crystal Meth's Appeal for People Living with HIV

- People with HIV report not having to worry about rejection based on status
- Burnout on safer sex: crystal meth use coincides with condomless sex and sex without HIV pre-exposure prophylaxis (PrEP)

# Recreation Vs. Addiction

- Not all people who use crystal meth become physiologically dependent
- While some people may not escalate use, will often have less safe sex while using
- Many people will go for long periods without escalating use and stop
- Some will use for a long period time and gradually increase use
- Others may develop addiction rapidly

# Patterns of Increase in Crystal Meth Use

- Weekend use extends to weekday use
- Extended periods of heavy use
- Increased sexual risk with use
- More intense sexual behaviors, increase in partners, rougher sex
- People living with HIV start to miss taking antiretroviral medication, others start to miss PrEP
- Missed work, constantly covering up use



# Crystal Meth and Sexually Transmitted Infections (STIs)

- At parties where crystal meth is used, multiple partners is the norm
- Syphilis: painless lesion; primary lesion on tonsil or in rectum is often not seen
- Evolution of gonorrhea resistant to ciprofloxacin
- Lymphogranuloma venereum (aggressive form of chlamydia)
- Methicillin-resistant Staphylococcus aureus
- HIV
- Hepatitis

# Crystal Meth and Hepatitis C

- Increase risk of transmission with injecting (slamming), more traumatic sex, sharing bumpers and straws with snorting
- Possibility of increase in cognitive deficits with combination of crystal meth, hepatitis C and HIV, separate from how advanced liver disease is
- Crystal meth adversely impacts engagement in hepatitis C care

# Negative Health Effects (Early)

- Paranoid ideation/delusions, hallucinations
- Depression after high is gone
- Serotonin syndrome when mixed with other club drugs or synaptic serotonin reuptake inhibitors (SSRIs)
- Vascular (stroke, myocardial infarction, colitis)
- Seizure related to overheating

# Negative Health Effects (Chronic Use)

- Persistent psychiatric problems: psychosis and depression
- Memory deficits
- Dental decay related to decreased saliva, grinding teeth, increased sugar intake
- Dermatological effects due to skin picking, “crystal bumps”
- Erectile dysfunction
- Muscle wasting
- Damage to relationships, occupation, finances

# Addressing Crystal Meth Use in Clinical Care

- 20-minute follow-up visits
  - Cannot solve all problems
- Avoid argument
- Do not underestimate ambivalence
  - Relapse is common, should not be thought of as good/bad, it just happens
  - Provider's agenda may not be the patient's agenda
  - Patients do hear what we say, when they are ready



# Harm Reduction

- Many people are not ready to stop, but will engage in care
- Ask patients: what is their bottom line, what would lead them to think there is a problem?
- Hydrate, eat
- Fluoride rinse, sugar free hard candy/gum
- Plans for taking medication during use, can someone be on meds while using; discuss PrEP
- Frequent STI screening
- Safer sex, serosorting

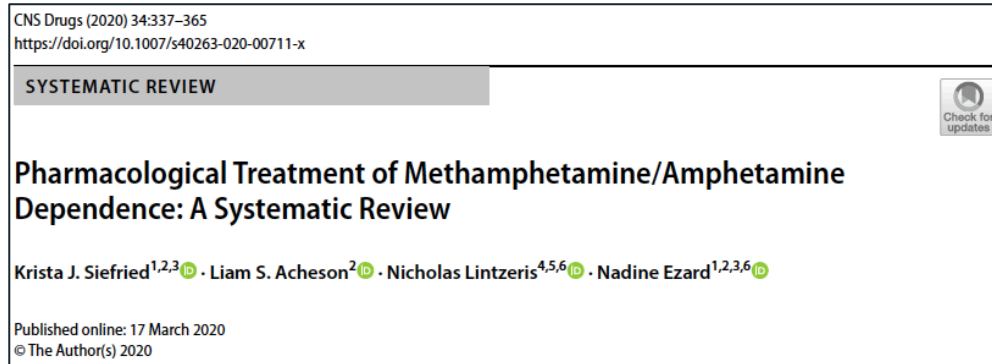
# What Brings Crystal Meth Users Into Recovery?

- Seroconversion
- Work performance
- Relationships/family
- Shame
- Fear around meth-induced psychosis
- HIV not well-controlled
- Primary treatment team

# Sex and Shame

- Important to deal with issues of shame and sex
- Sexual experimentation: multiple partners, receptive sex, sex without condoms or PrEP
- Internet videos
- Sex in sobriety can feel boring, be triggering, can feel less intimate

# Pharmacological Treatment and Non-pharmacological Interventions



- Mixed or weak positive signals, most consistent signals with stimulant agonist treatment (dexamphetamine, methylphenidate), naltrexone and topiramate



- Treatment efficacy in promoting abstinence, reduced use or decreased cravings with behavioral interventions, contingency management, residential treatment, repetitive transcranial magnetic stimulation, and matrix model



# Positive Affect Intervention

- Multi-component intervention developed by Adam Carrico and colleagues
  - Focuses on improving mood states to boost effectiveness of community-based contingency management for stimulant abstinence among methamphetamine users, and in turn achieve more durable reductions in HIV viral load.
- Positive affect intervention focuses on: 1) positive event noting; 2) positive event capitalizing; 3) gratitude; 4) informal and formal mindfulness; 5) positive reappraisal; 6) personal strengths; 7) attainable goals, and 8) acts of kindness (altruism)

# Positive Affect Intervention

- Many people of different skill levels could implement
- Augments contingency management in a compelling way (increasing payments for non-reactive urine drug screens performed 3x/week over 12 weeks)
- Data indicating an impact on viral suppression that is very strong
- Applicable more broadly than only with MSM, and more broadly in terms of other stimulants (e.g., cocaine instead of crystal meth)

# Recovery

- Extreme commitment vs. ambivalence
- Dealing with roles of partners/family
- Inpatient hospitalization often not an option
- Individual and group therapy
- Motivational enhancement therapy
- Partial hospitalization programs
- Crystal Meth Anonymous (CMA), Alcoholics Anonymous (AA), Narcotics Anonymous (NA)
- Tweaker.org

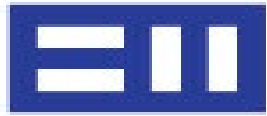
# Early Sobriety

- Often turbulent
- Seroconversion can be trigger to use
- Initially partner/family supportive, however when crisis is over this may change
- Need time in recovery, relapse can happen even after a year out



## Contact Information:

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# NATIONAL LGBTQIA+ HEALTH EDUCATION CENTER

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The National LGBTQIA+ Health Education Center provides educational programs, resources, and consultation to health care organizations with the goal of optimizing quality, cost-effective health care for lesbian, gay, bisexual, transgender, queer, intersex, asexual, and all sexual and gender minority (LGBTQIA+) people.

The Education Center is part of The Fenway Institute, the research, training, and health policy division of Fenway Health, a Federally Qualified Health Center, and one of the world's largest LGBTQIA+ focused health centers.

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 617.927.6354

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 [www.lgbtqiahealtheducation.org](http://www.lgbtqiahealtheducation.org)

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# QUESTIONS?



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