



Methamphetamine use among men who have sex with men

Mike Barry, PhD & Peter Cleary



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Zoom Webinar Logistics

- Only panelists and hosts can share video and audio.
- Please enter your comments and questions in the chat and Q&A.
- Be respectful and curious.
- Webinar is being recorded and will be shared here by tomorrow: <https://adai.uw.edu/cedeer/focus-on-meth/>



Focus on Meth 2025-Be part of the conversation

January 23, *Latest Overdose Trends and Reasons for ED Visits*, Dr. Lauren Whiteside and Dr. Caleb Banta-Green.
Recording available.

February 26, 12-1

- *Harm Reduction at SSPs and in Primary Care*, Christina Muller-Shinn, Mason County Department of Health and Dr. Sarah Leyde, UW Harborview

March

- **March 12, 12-1 PT:** *What's in the Meth? Results from the WA Community Drug Checking Network*
- **March 27, 1-2 PT:** *Syphilis, HIV, hepatitis C, and other infectious diseases*. Dr. Tim Menza, UW, and Melissa Cross, Blue Mountain Heart to Heart

April 17, 11-12 PT: *Meth Use among Men who have Sex with Men*, Peter Cleary, Project NEON, and Mike Barry, UW Epidemiology PhD candidate.

June 12: *Methamphetamine Symposium*

Coming Soon!

State Opioid Response TA Team will host webinars focused on clinical care for people who use methamphetamine.

<https://adai.uw.edu/ceder/focus-on-meth/>



Presenters

- Mike Barry, PhDc, UW Dept of Epidemiology
- Peter Cleary, Project NEON

Characterizing the meth epidemic among cisgender men and transgender people who have sex with males in the U.S. using a sequential, mixed-methods approach

results of a community-based research endeavor

Mike Barry, PhD MPH (he/him)

Terms & definitions

Cisgender men

Men who were assigned male sex at birth

Transgender people

Umbrella term including anyone who is not cisgender; examples: transgender women (women assigned male sex at birth), transgender men (men assigned female sex at birth), nonbinary people, and other gender expansive people

CMTSM

Collective term including **C**isgender **M**en and **T**ransgender people who have **S**ex with **M**ales

Why this group? **Intersection of HIV and meth epidemics globally.**

StUD

Stimulant **u**se **d**isorder – clinically-defined/diagnosed condition wherein meth use is of clinical significance

MRAO

Meth-related **a**dverse **o**utcome(s) defined by our research team and based on available literature and our preliminary qualitative work; may not fit into a clinical StUD definition but is significant of meaningful harms from meth use



Background & motivation

Methamphetamine (meth) key information

- Highly potent central nervous system stimulant drug
- Great addictive potential
- Use increasing in general US population since 2014
- Disproportionately high use among **cisgender men and transgender people with male sex partners (CMTSM)**
- Sequelae of meth use include...
 - **Physical ailments:** cardiovascular disease; organ damage; overdose
 - **Mental & neurological health:** Psychosis, cognitive decline
 - **Infectious disease transmission:** HIV, HCV, sexually-transmitted infections



Background & motivation

Knowns

About 1-in-4 CMTSM have ever used meth

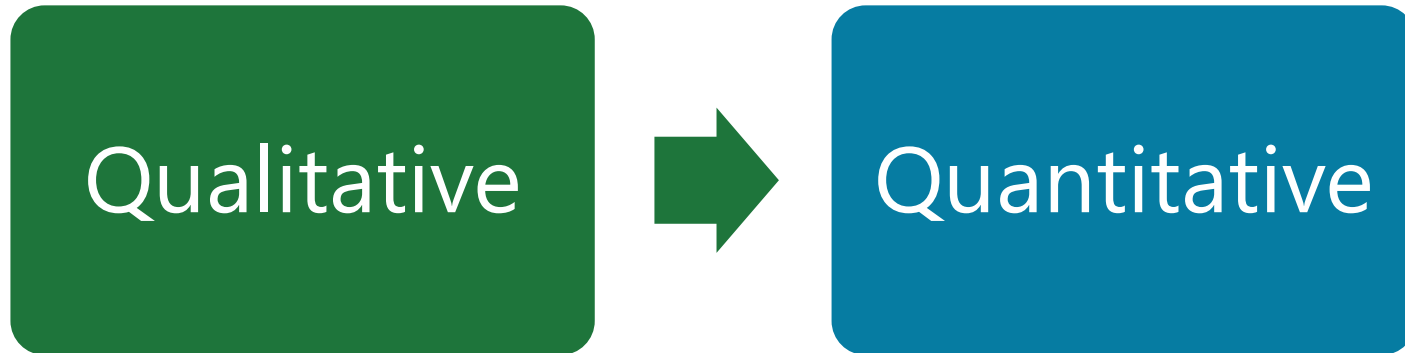
Meth can lead to stimulant use disorder (SUD) and other morbidity

Some CMTSM probably use meth casually. Not everyone will develop morbidity, at least not right away.

Interventions for CMTSM with SUD have been well-described.



Research approach



- Determinants of meth initiation and ongoing use
- Meth use patterns over time among individuals
- **Develop a quantitative instrument**

- Temporal patterns of meth initiation and development of StUD/MRAO
- Risk factors/correlates thereof
- Detect epidemic trends in initiation

Methods :: *Qualitative*

Gender-inclusive, **Community-Based Participatory Research** principles

- Peer Seattle, Seattle's LGBTQ+ Center



Phenomenological framework

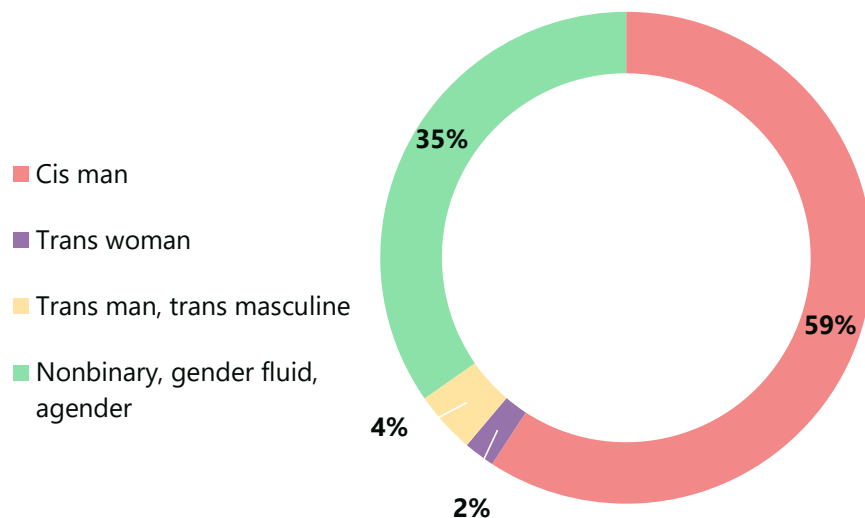
- Understand the experience of meth use as participants perceived it – “in your own words, what happened?”
- Inclusion: CMTSM ≥ 18 years old living/staying in King, Pierce, Snohomish Counties, WA
- Semi-structured interview guide developed with qualitative lead and community partners (~40-60 minutes)
- \$60 incentives



Results :: *Qualitative*

N=49 Participants

Participants: gender identity



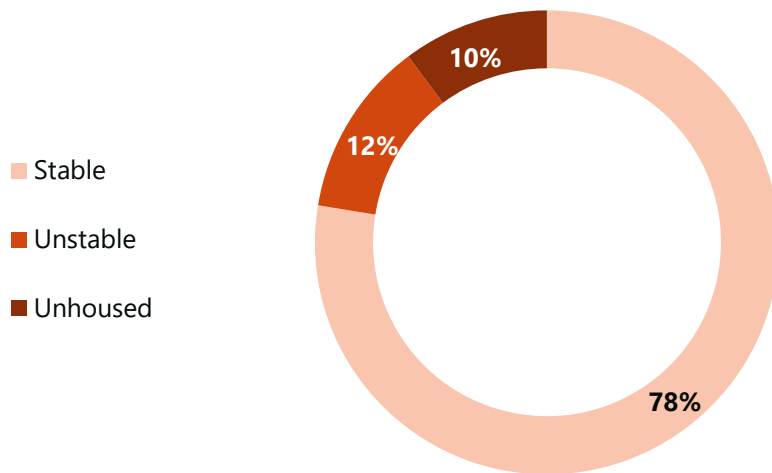
Participants: race & ethnicity

Black or African American	4 (8%)
Indigenous	5 (10%)
Latinx or Hispanic	4 (8%)
Mixed or multiple*	3 (6%)
Pacific Islander	1 (2%)
White or Caucasian	32 (65%)

Results :: *Qualitative*

N=49 Participants

Participants: current housing stability



Participants: time characteristics

Median (min, max)	
Age	40 (22, 66)
Years since first methamphetamine use	13 (0, 41)
Age at first methamphetamine use	22 (14, 50)

Results :: *Qualitative*

Qualitative Themes

1. CMTSM are introduced to meth in a **variety of settings and contexts**
2. Frequency, volume, and administration routes of meth use **vary widely** over time for individual CMTSM
3. Patterns of meth use among CMTSM are influenced by the desire to **cope** with changing life circumstances and associated stressors



Methods :: *Quantitative*

Instrument development

- Draft questionnaire using ASSIST, other validated measures, and **qualitative findings**
- Cognitive interviewing with 15 CMTSM
- Adjust questionnaire ← → Conduct 1-2 interviews (repeat)
- Nine rounds of editing → **final questionnaire**

Data collection

- June-October 2024 – online survey of CMTSM across the US



Methods :: *Quantitative*

Scientific questions

1. What are the correlates of meth initiation among CMTSM?
2. Among those who initiate meth, what are the correlates of developing StUD/MRAO?
3. Are there secular trends in initiating meth?
4. Among those who initiate meth, what is the temporal relationship between initiation and first episode of each correlate?
5. Among those who initiate meth, how commonly does StUD/MRAO develop, and how quickly?
6. Among those who develop StUD/MRAO, what is the temporal relationship between onset of StUD/MRAO and first episode of each correlate?

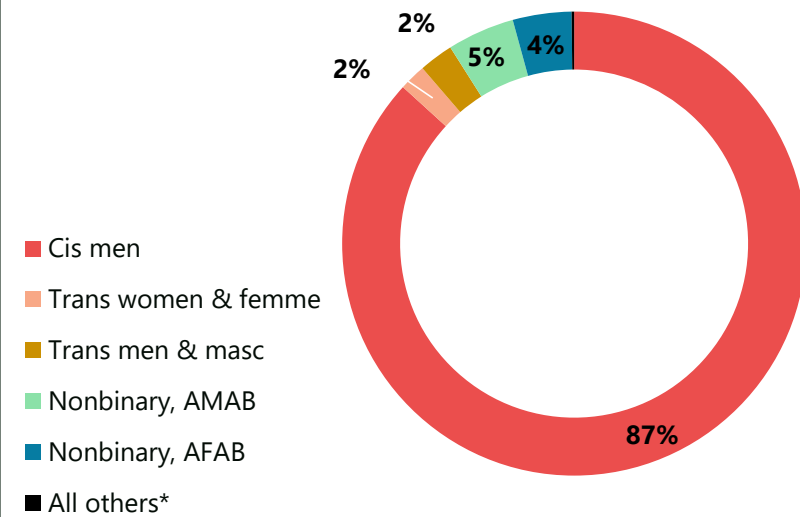
Analyses

- Descriptive statistics
- Log binomial regression models
- Time-to-event analyses

Results :: *Quantitative*

Sample: **N=1,720**

Participants: Gender & sex



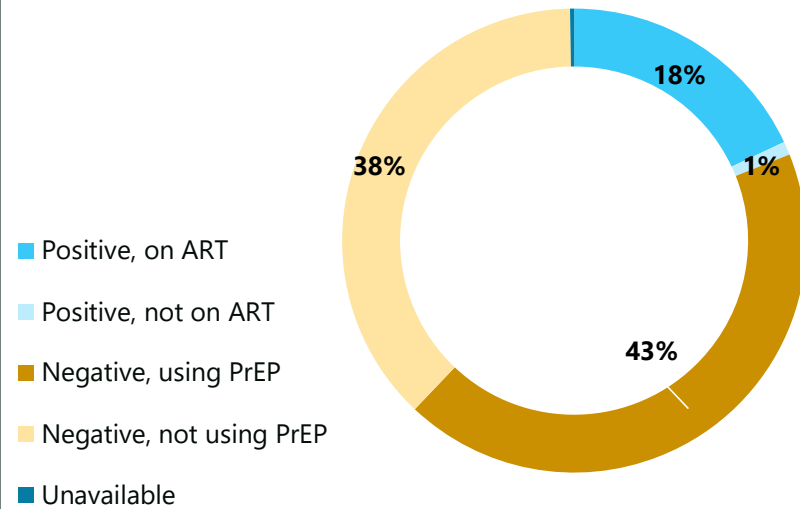
Race & ethnicity*

Black & African American	256	14.9%
East & Southeast Asian	90	5.2%
Hispanic, Latinx, & Chicanx	271	15.8%
Indigenous, American Indian, Alaska Native, & Native American	57	3.3%
Middle Eastern & North African	25	1.5%
Native Hawaiian & Pacific Islander	21	1.2%
South Asian	19	1.1%
White, Caucasian, & European	1176	68.4%

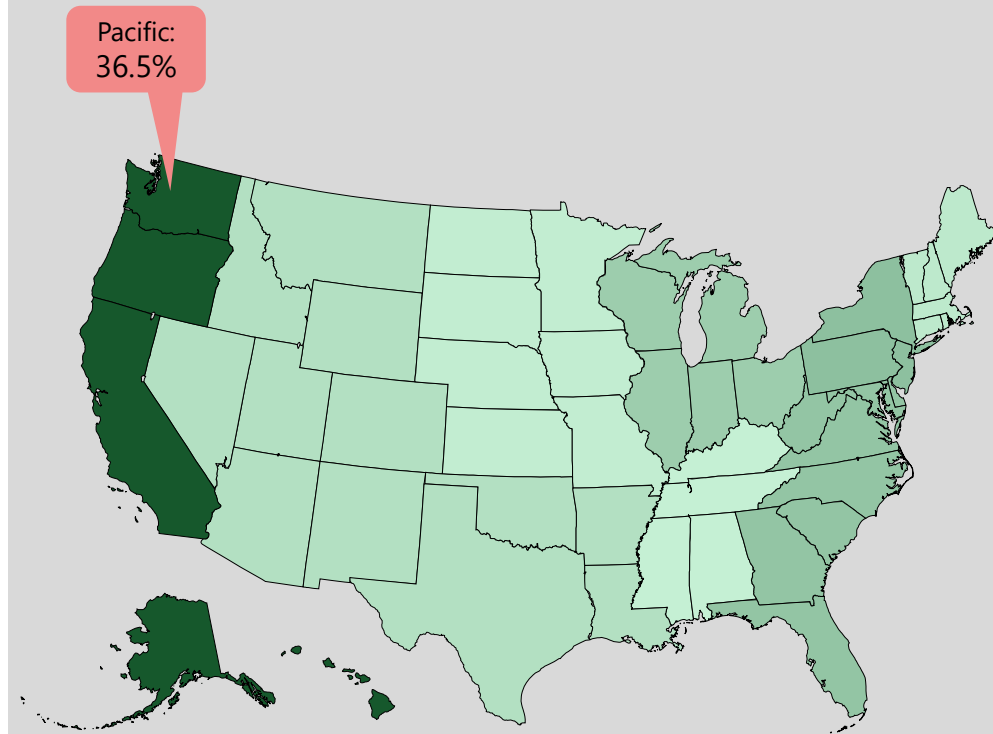
Results :: *Quantitative*

Sample: **N=1,720**

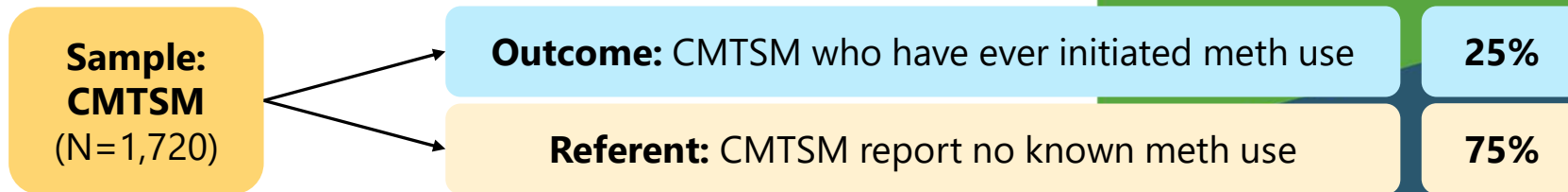
Participants: HIV status



Participants: US Census Regions



Results :: Quantitative (1)



Model 1: Sociodemographic variables

Assigned female sex at birth (compared to assigned male sex at birth)	aPR: 0.41 (0.20, 0.72) 59% (18, 80%) less likely to have initiated meth
Education (compared to college/4-year)	\leq high school - aPR: 1.48 (1.20, 1.81) Some college/2-year - aPR: 1.51 (1.23, 1.84) >college - aPR: 0.71 (0.57, 0.89)

Model 2: Health & Social Determinants

Living with HIV	aPR: 1.80 (1.41, 2.30)
History of prescription stimulant use	aPR_{Rx}: 1.56 (1.22, 1.97) aPR_{noRx}: 1.82 (1.40, 2.35)
History of housing instability/ homelessness	aPR: 1.41 (1.08, 1.83)
History of sex exchange	aPR: 2.06 (1.62, 2.62)

Results :: Quantitative (2)

**Sample: CMTSM
who have
initiated meth
(N=408)**

Outcome: Developed StUD/MRAO

67%

Referent: No evidence of StUD/MRAO

33%

Model 1: Sociodemographic variables

None of gender; race; education; region were associated with developing StUD/MRAO.

Model 2: Health & Social Determinants

Living with HIV

aPR: 1.80 (1.41, 2.30)

Inability to afford basic needs

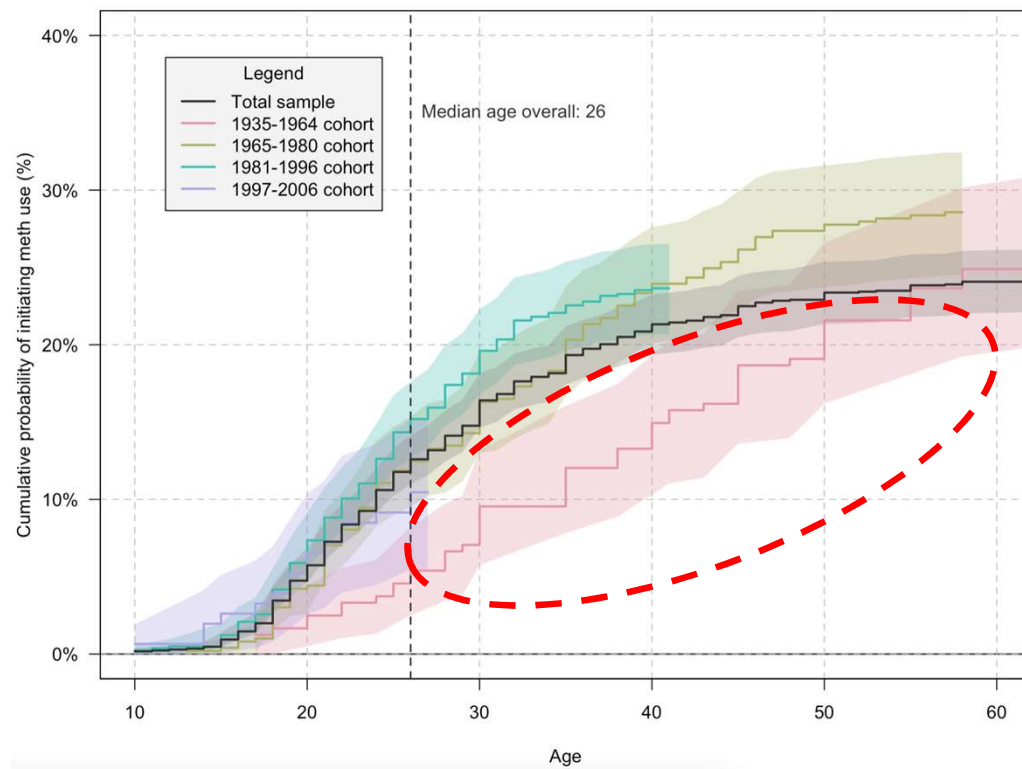
History of housing instability/ homelessness

History of sex exchange

aPR: 2.17 (1.50, 3.25)*

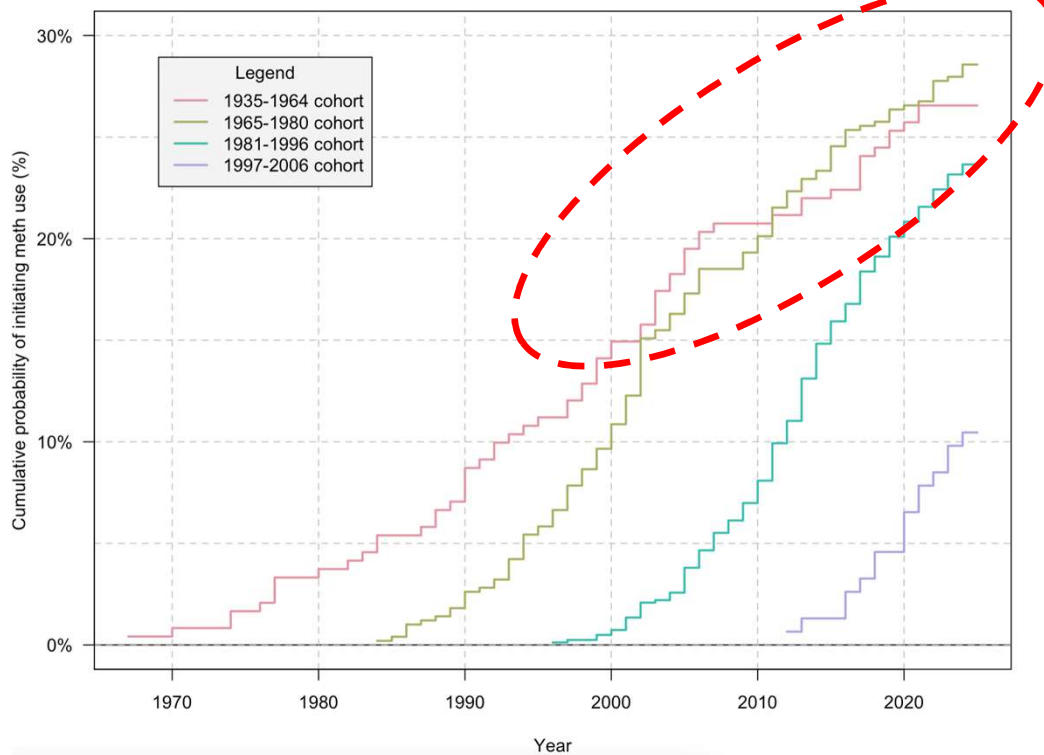
Results :: *Quantitative* (3)

Cumulative probability of initiating meth use given age among CMTSM (N=1,720)



Results :: *Quantitative* (3)

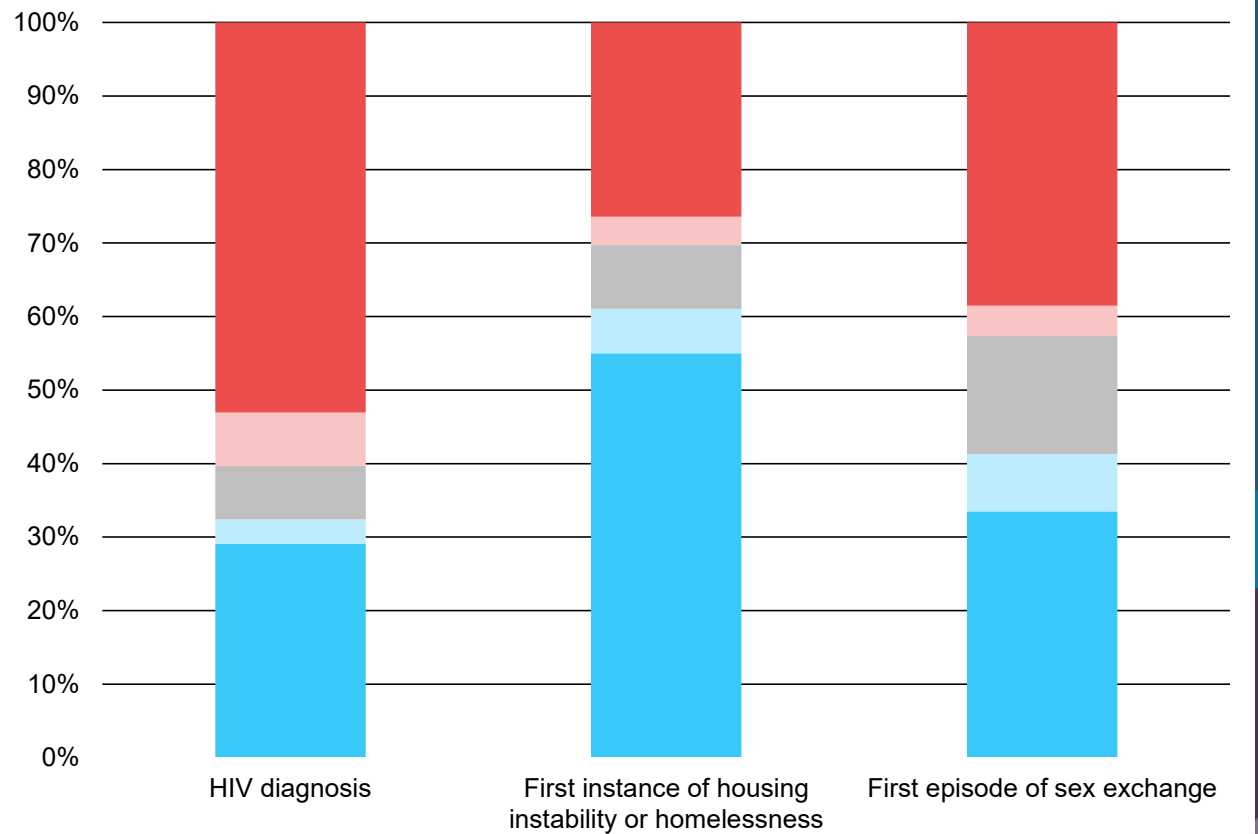
Cumulative probability of initiating meth use given year, by cohort, among CMTSM (N=1,720)



Results :: Quantitative (4)

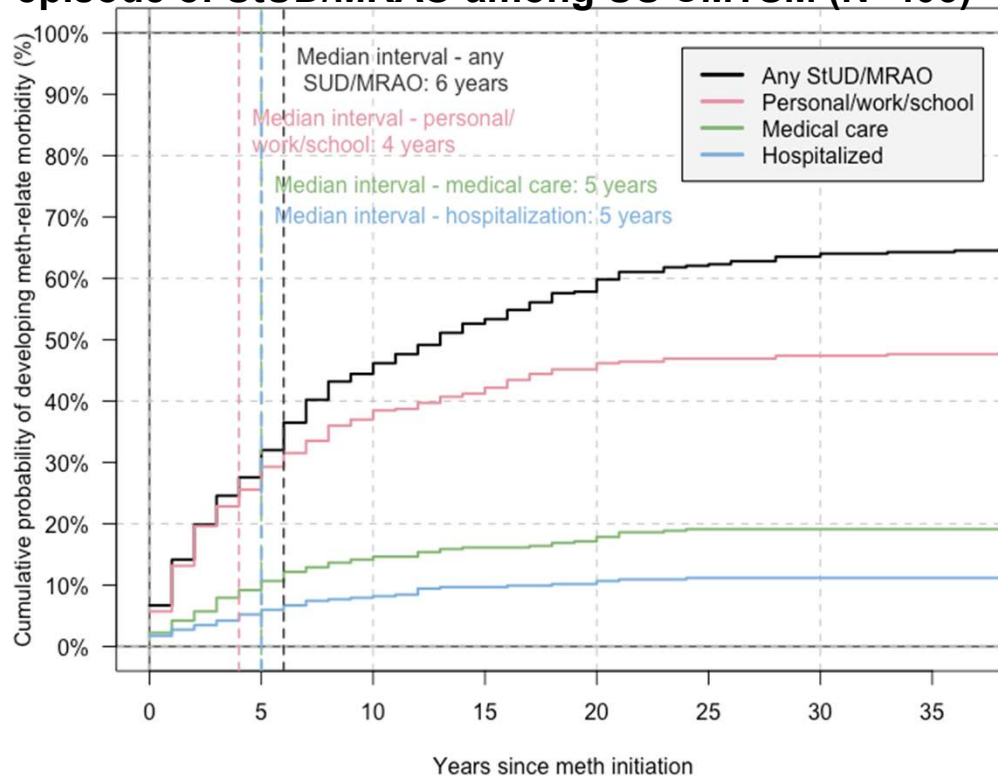
Temporal relationships between meth initiation and first episode of each of its correlates among cisgender men and trans people who have sex with males, United States, 2024 (N=1,720)

- First episode of correlate event follows meth initiation by > 1 year
- First episode of correlate event follows meth initiation by 1 year
- First episode of correlate event and meth initiation occur same year
- First episode of correlate event precedes meth initiation by 1 year
- First episode of correlate event precedes meth initiation by > 1 year



Results :: Quantitative (5)

Cumulative probability plot of meth initiation to first episode of StUD/MRAO among US CMTSM (N=403)



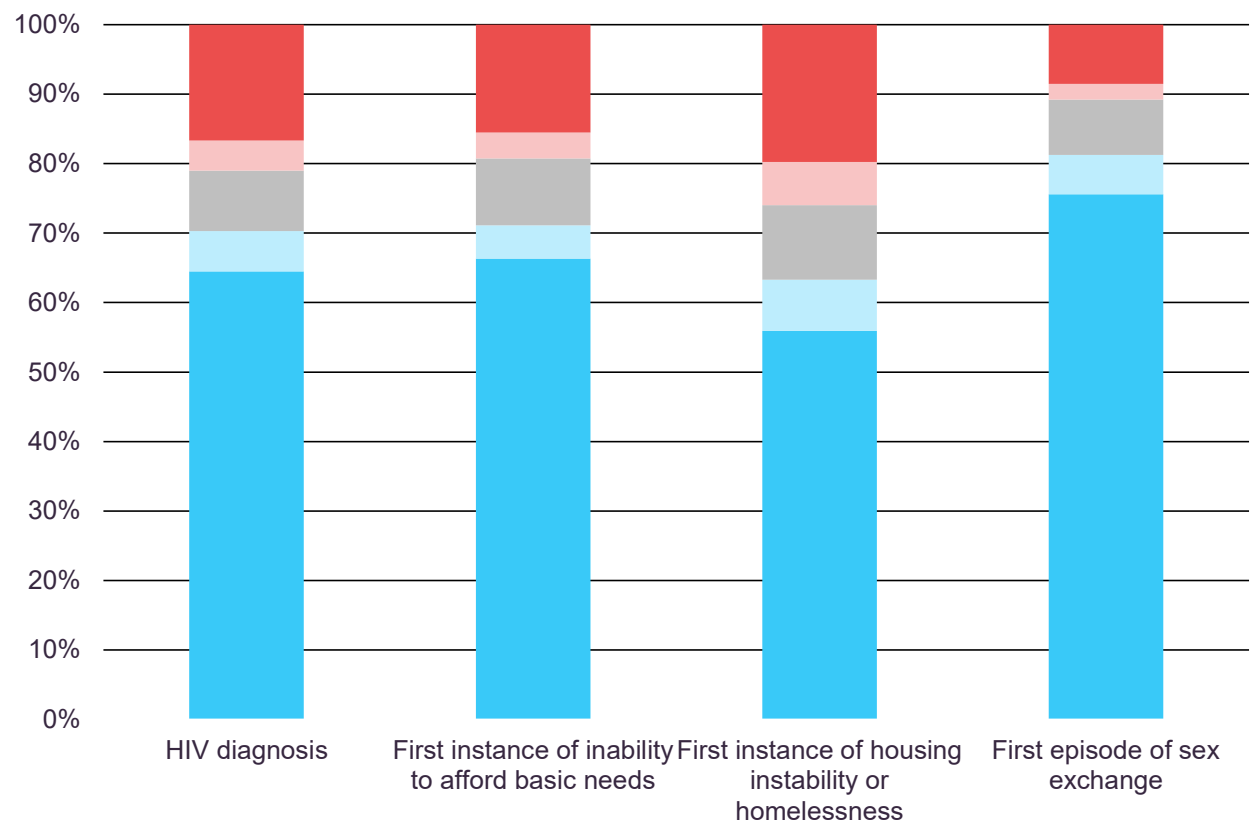
Years since meth initiation	5	10	15	20	35	30	35
N at risk	112	87	61	49	30	18	10



Results :: Quantitative (6)

Temporal relationships between StUD/MRAO onset and first episode of each of its correlates among cisgender men and trans people who have sex with males, United States, 2024 (N=403)

- First episode of correlate event follows meth initiation by > 1 year
- First episode of correlate event follows meth initiation by 1 year
- First episode of correlate event and meth initiation occur same year
- First episode of correlate event precedes meth initiation by 1 year
- First episode of correlate event precedes meth initiation by > 1 year



Conclusions

- CMTSM in the **Baby Boomer** generation report **initiating meth later in life**, compared to more recently-born generations. *Unclear whether this is selective mortality, secular changes in drug supply/purchasing, and/or something else/a combination.* **The initiation of meth use appears stable, given age, since.**
- Irrespective of gender, **male sex assignment at birth** is associated with meth initiation among CMTSM. *Future gender- and sex-specific research may disentangle this finding further.*
- Among CMTSM who both initiate meth and are living with HIV, **meth initiation precedes HIV diagnosis for ~2/3.** *Future studies may leverage HIV testing data to determine whether meth precedes HIV acquisition this frequently.*
- **Most CMTSM who initiate meth will develop StUD/MRAO**, though this process can take a few years. *Our community-advised definition of StUD/MRAO would suggest that many CMTSM can casually, rarely, or intermittently use meth, though most do not.*
- **Social vulnerability** (e.g. history of homelessness) appears to predict the development of StUD/MRAO. *CMTSM who have tried meth and later develop StUD/MRAO often develop social vulnerability in the process.*
- Risk factors of initiating meth and, among those who do, developing StUD/MRAO are **shared risk factors of HIV acquisition.** *Our findings support that HIV and meth are syndemic among CMTSM.* **Approaches to HIV prevention for CMTSM should include meth-specific components; meth interventions may be co-located with HIV prevention and care services.**





Acknowledgements

Dissertation committee

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- Peter Cleary

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UNIVERSITY of WASHINGTON

**POPULATION
HEALTH INITIATIVE**

CENTER *for* **AIDS & STD** **W**

project NEON reducing harm in Seattle's Queer community since '93

MSM & METH USE

Peter Cleary
Seattle's LGBTQ+ Center


-
- Introduction
 - What am I sharing with you
 - Empirical
 - Anecdotal
 - Not affiliated with any organization
 - Questions are encouraged



Men who have Sex with Men and Methamphetamine



MSM & METH

- WHY FOLKS USE
 - MSM/METH WHAT IS THE CONNECTION
 - WHAT IS YOUR GOAL
 - HOW TO ENGAGE AND SUPPORT FOLKS
- 

Why do folks use substances?



Why do folks use substances?

- SURVIVAL
- RECREATION
- SELF MEDICATE
- ESCAPE
- SUD

The background is a light blue gradient. In the top left corner, there are several white water droplets of varying sizes. In the bottom left corner, there are two overlapping parallelograms, one purple and one green. In the bottom right corner, there are more white water droplets, some of which are larger and more detailed than the others.

What connects Meth with MSM?

The background is a light blue gradient. In the top left corner, there are several white water droplets of varying sizes. In the bottom right corner, there are more white water droplets, including a large one. On the left side, there are two overlapping parallelogram shapes: a purple one on top and a green one below it. The text "What connects Meth with MSM?" is centered in a dark green, bold, sans-serif font.

What connects Meth with MSM?

Sex



What is your goal?



What is your goal?

To help this person: health, services, housing



MSM & METH

○ WHY FOLKS USE

- SURVIVAL
- RECREATION
- SELF MEDICATE
- ESCAPE
- SUD

○ MSM/METH WHAT IS THE CONNECTION

- SEX

○ WHAT IS YOUR GOAL

- TO HELP THIS PERSON: HEALTH, SERVICES, HOUSING
- 

The background is a light blue gradient. In the top left corner, there are several white water droplets of varying sizes. In the bottom right corner, there are more white water droplets, including a large one. In the bottom left corner, there are two overlapping parallelogram shapes: a purple one on top and a green one below it. The text "How to engage this person?" is centered in the middle of the slide in a bold, dark purple font.

How to engage this person?

The background is a light blue gradient. In the top left corner, there are several white water droplets of varying sizes. In the bottom right corner, there are more white water droplets, some of which are larger and more detailed. In the bottom left corner, there are two overlapping geometric shapes: a purple parallelogram and a green parallelogram, both tilted at an angle.

How to engage this person?

- **Normalize Harm Reduction**
- **Build Trust**
- **Encourage and Support Self Determination**

Q.

AND

Thank you

A.

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Thank you!!! And Q & A

Huge thank you to our wonderful speakers!!!

And please put your questions in the chat or Q & A



Resources

- [WA State methamphetamine overdose death data](#)
- [Methamphetamine Overdose/Overamping](#)
- [What is Stimulant Use Disorder?](#)
- [Overview of Treatment for Stimulant Use Disorder](#)
- [Results from the 2023 WA State Syringe Services Program Health Survey](#)
- [Perspectives of People Who Use Methamphetamine on Reducing or Stopping Their Use](#), qualitative interviews from 2021
- [WA State Community Drug Checking Network data on methamphetamine](#)