



Impact of a NYC Harm Reduction Program Tailored for Populations Using Crystal Methamphetamine

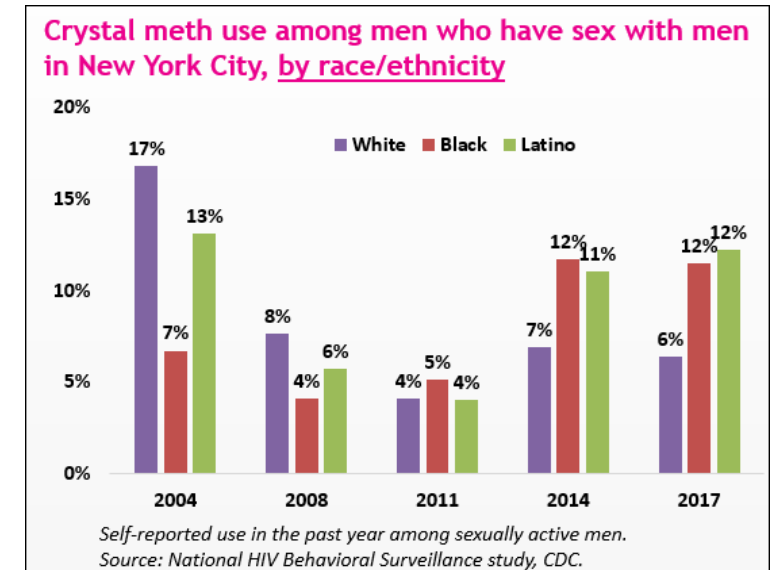
Continuum 2024 • June 9-11, 2024 • Puerto Rico

No conflicts of interest to disclose

Background

Crystal Methamphetamine (Meth) & Public Health

- ▶ Use of crystal meth is increasing, particularly among Black and Latino men who have sex with men (MSM) in New York City (NYC)¹
- ▶ Among people with HIV (PWH), meth use is associated with lower engagement in health care and lower viral suppression^{2,3}
- ▶ Among people without HIV, meth use is associated with increased risk of HIV exposure and reduced pre-exposure prophylaxis (PrEP) uptake^{2,3}



1. Aidala A, Yomogida M, Harned E, Dorshimer M. Substance Use by PWH in the CHAIN Study: In New York City and the Tri-County Region. Mailman School of Public Health at Columbia University; 2022:16.

2. Shoptaw S, Stall R, Bordon J, et al. Cumulative exposure to stimulants and immune function outcomes among HIV-positive and HIV-negative men in the Multicenter AIDS Cohort Study. *Int J STD AIDS*. 2012;23(8):576-580.

3. Schwarcz S, Scheer S, McFarland W, et al. Prevalence of HIV Infection and Predictors of High-Transmission Sexual Risk Behaviors Among Men Who Have Sex With Men. *Am J Public Health*. 2007;97(6):1067-1075. doi:10.2105/AJPH.2005.072249

Crystal Meth Harm Reduction Services Program

- ▶ The Crystal Meth Harm Reduction Services (MTH) Program was implemented at three community-based organizations (CBOs) in Manhattan, serving participants from all five boroughs and the surrounding metropolitan area
- ▶ Program Goals
 - ▷ Reduce new HIV infections and improve HIV treatment outcomes
 - ▷ Provide health education and reduce harms associated with use
 - ▷ Offer support services and individual counseling
 - ▷ Link to clinical services for PrEP/PEP, HIV treatment, and medication assisted treatment
 - ▷ Connect to mental health services for depression, anxiety, and psychosis

Program Structure

- ▶ 3 agency sites
 - ▷ Clinical/medical services (available at 1 site)
 - ▷ Outreach/supportive services (available at all sites)
- ▶ 2 combined funding streams
 - ▷ Federal: HRSA Ryan White Part A
 - ▷ Local: New York State and NYC
- ▶ Allows for delivery of complementary services

Program Components

Core Program Services

HIV prevention and care services

- including linkages to PrEP, PEP, and iART

Direct medical services

- including STI screenings and treatment

Substance use treatment

- individual and group substance use counseling
- medication assisted treatment (MAT)

Health education

- including overdose prevention training

Benefits navigation services

- health insurance linkages
- linkages and connections to additional supportive services such as: housing, food, mental health care

Methods

Evaluation Aims

- ▶ Structured by the *Reach-Effectiveness-Adoption-Implementation-Maintenance* (RE-AIM) framework¹
- ▶ Included individual-level outcomes regarding, broadly: enrollment, meth use, PrEP use, service utilization, seroconversions, among others
 - ▷ Particularly among priority populations

1. Glasgow RE, Estabrooks PE. Pragmatic Applications of RE-AIM for Health Care Initiatives in Community and Clinical Settings. *Prev Chronic Dis* 2018; 15:170271. DOI: <https://doi.org/10.5888/pcd15.170271>.

Methods: Eligibility & Priority Populations

- ▶ Priority populations included MSM, transgender people who have sex with men, and people of color within these groups
- ▶ Eligibility criteria:
 - ▷ Completed program enrollment
 - ▷ Completed an intake assessment from January 2017 to June 2022
 - ▷ Used meth in the last 12 months
 - ▷ Received at least one service

Methods: Data Sources

- ▶ Demographic data, including gender identity, sexual orientation, and race/ethnicity were collected through the Electronic System for HIV/AIDS Reporting and Evaluation (eSHARE)
- ▶ Programmatic data, including intake assessments, reassessments, and service delivery data were collected through eSHARE
- ▶ HIV diagnosis and care data came from the NYC HIV Surveillance Registry (the Registry)

Methods: RE-AIM Domains

▶ Reach

- ▶ The number, proportion, and representativeness of individuals who participate in the program
 - ▶ Priority population participation & representativeness

▶ Effectiveness

- ▶ The impact of the intervention on main individual outcomes
 - ▶ Meth use, PrEP use, seroconversion

Methods: RE-AIM Domains

▶ Implementation

- ▶ Participants' receipt of core services
 - ▶ PrEP prescription, health education, counseling, etc.

▶ Maintenance

- ▶ Long-term sustained effects of the program on participants' behavior
 - ▶ Long-term meth and PrEP use, retention in HIV care

Methods: Reassessment

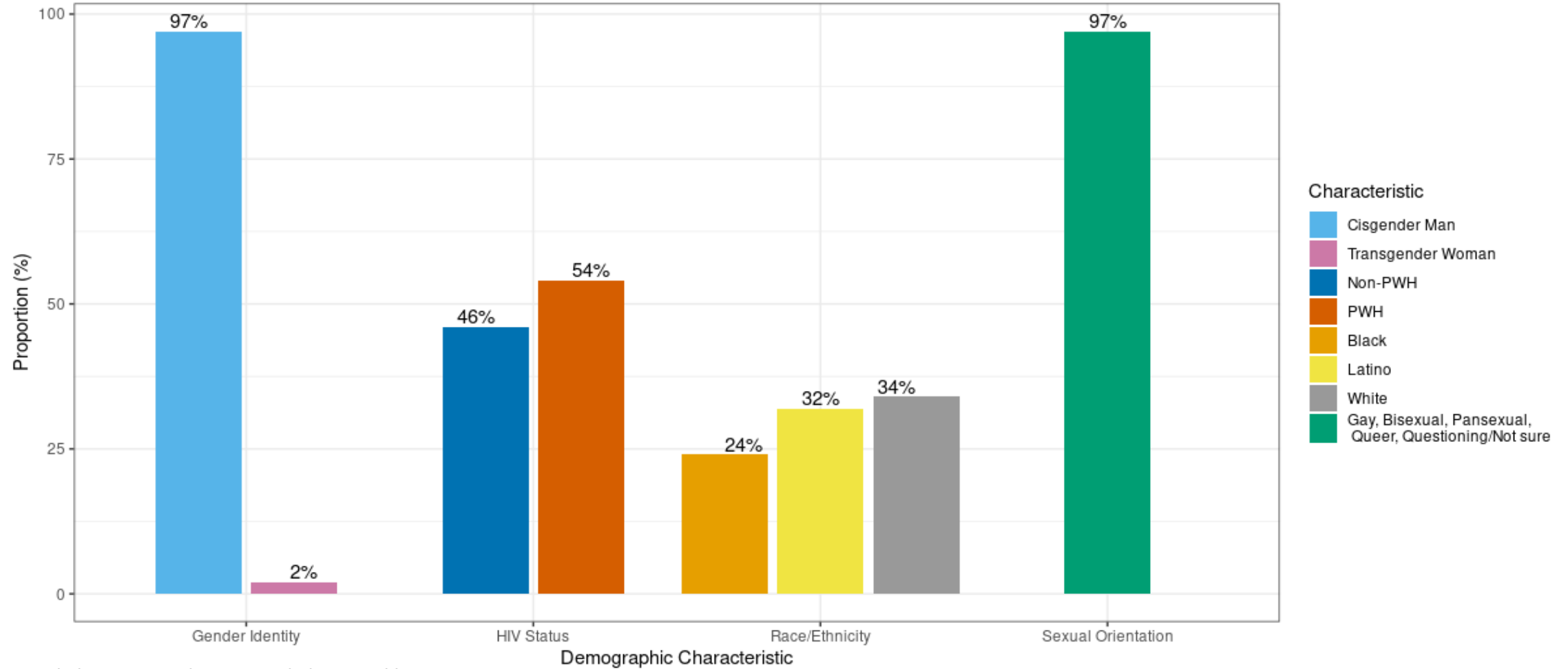
- ▶ Reassessment key to determining changes in *reported behaviors* of participants
- ▶ Intake and reassessment forms collect information on use of meth, mental health, physical health, sexual health, and use of PrEP/PEP

Results

Participants Reflect Populations Most Impacted

Sociodemographic Characteristics of MTH Participants, 2017 – 2022¹

N=545



¹Participants can belong to more than one sociodemographic category

Trends in Use of Meth

- ▶ Key Finding: Meth use decreased among those reassessed
- ▶ 91% of participants reported using meth in the last three months at enrollment
- ▶ 44% had used meth in the 3 months before being reassessed
 - ▷ 70% of those with multiple reassessments reported no continued meth use

Table 1. Select Metrics Stratified by Priority Population, Crystal Meth Harm Reduction Program in NYC, 2017-2022

Indicator	Transgender/ NB/GNC	Number Eligible	All MSM	Number Eligible	Black MSM	Number Eligible	Latino/ Hispanic MSM	Number Eligible	Asian/Pacific Islander MSM	Number Eligible	White MSM	Number Eligible
	%	N	%	N	%	N	%	N	%	N	%	N
Meth Use at Reassessment ^a	33.3	3	44.5	155	47.1	34	46.8	47	46.2	13	41.8	55

^aDenominator: includes all individuals who had a reassessment. Numerator: includes those who had used meth in the past three months

PrEP Linkage & Use

- ▶ Key Finding: PrEP usage remained consistent
- ▶ Nearly half (47%) of participants were on PrEP at enrollment
 - ▷ And of those, 58% were still on PrEP at reassessment

Table 2. Select Metrics Stratified by Priority Population, Crystal Meth Harm Reduction Program in NYC, 2017-2022

Indicator	Transgender/ NB/GNC	Number Eligible	All Men Who Have Sex With Men (MSM)	Number Eligible	Black MSM	Number Eligible	Latino/ Hispanic MSM	Number Eligible	Asian/Pacific Islander MSM	Number Eligible	White MSM	Number Eligible
	%	N	%	N	%	N	%	N	%	N	%	N
On PrEP at Enrollment	0.0	2	48.5	241	37.5	40	45.6	68	56.3	16	52.5	99
On PrEP at Reassessment ^a	100.0	1	50.0	80	37.5	16	45.0	20	62.5	8	53.3	30

^aDenominator: includes individuals without HIV who had a reassessment. Numerator: includes those who reported using PrEP at reassessment.

PrEP Linkage & Use (Continued)

- ▶ PrEP was prescribed to 43% of participants who were not on PrEP at enrollment
 - ▷ Specifically, prescribed to 51% of those who specified they thought it would benefit them
 - ▷ PrEP use at reassessment among those not on PrEP at enrollment was 33%

Service Utilization Summary

- ▶ Most utilized services:
 - ▷ Health education (88%)
 - ▷ Benefits navigation (85%)
 - ▷ Alcohol and other drug counseling (79%)

- ▶ Medication assisted treatment was provided to 10% of participants

Seroconversions among Participants

- ▶ 6.7% of participants seroconverted over the course of the program
 - ▷ 2.23 per 100 person-years
- ▶ Almost all (88%) of these participants were engaged in care within 30 days
 - ▷ 35% were virally suppressed within 3 months following their diagnosis

Table 3. Select Metrics Stratified by Priority Population, Crystal Meth Harm Reduction Program in NYC, 2017-2022

Indicator	Transgender/ NB/GNC %	Number Eligible N	All MSM %	Number Eligible N	Black MSM %	Number Eligible N	Latino/ Hispanic MSM %	Number Eligible N	Asian/Pacific Islander MSM %	Number Eligible N	White MSM %	Number Eligible N
Seroconversion ^a	50.0	2	7.1	241	15.0	40	7.4	68	6.3	16	3.0	99

^aDenominator: includes individuals without HIV enrolled in MTH. Numerator: includes those who had an HIV diagnosis following enrollment.

Outcomes for Participating PWH

- ▶ Key finding: retention in care among PWH consistently at or above 80%
- ▶ 80% were retained in care at enrollment
- ▶ 82% were retained in care at end of first year
- ▶ 87% were retained in care at end of second year of enrollment

Discussion

Discussion

- ▶ Many MSM were successfully reached, many barriers were overcome in recruitment for this program
- ▶ Representation of Black MSM and Transgender/NB/GNC participants was lower than hoped for based on potentially eligible participant population breakdowns at program sites
- ▶ Most reassessed participants were successful in reducing meth use and in maintaining that reduction or cessation of meth
- ▶ Uptake of PrEP among people not on it at enrollment was low
- ▶ High levels of seroconversions

Discussion

- ▶ Seroconversions (2.23/100 person-years) occurred at a similar rate to a national cohort of sexual and gender minorities who have sex with men of whom 14% used meth¹ (2.47/100 person-years)
- ▶ Seroconversions were higher (2.23/100 person-years) compared to the HIV incidence rate among MSM attending NYC Sexual Health Clinics in 2018 (0.82/100 person-years)²
- ▶ Future study should look into factors that can explain why participants seroconverted

1. Grov C, Westmoreland D, Morrison C, Carrico AW, Nash D. The Crisis We Are Not Talking About: One-in-Three Annual HIV Seroconversions Among Sexual and Gender Minorities Were Persistent Methamphetamine Users. *J Acquir Immune Defic Syndr*. 2020;85(3):272-279.
2. Jamison KE, Braunstein SL, Pathela P. Racial inequities in HIV incidence among men who have sex with men prior to and amidst an Ending the HIV Epidemic initiative. *AIDS*. Jan 23 2024;doi:10.1097/QAD.0000000000003845

Limitations

- ▶ This was a descriptive evaluation using observational data without a comparison group
 - ▷ Hard to tell if those reassessed were simply doing the best and able to return consistently
- ▶ A low proportion of participants completed a reassessment, limiting the ability to draw conclusions about effects of the program on the larger participant population
- ▶ Program participants may not represent the broader meth-using population in NYC

Co-authors & Acknowledgements

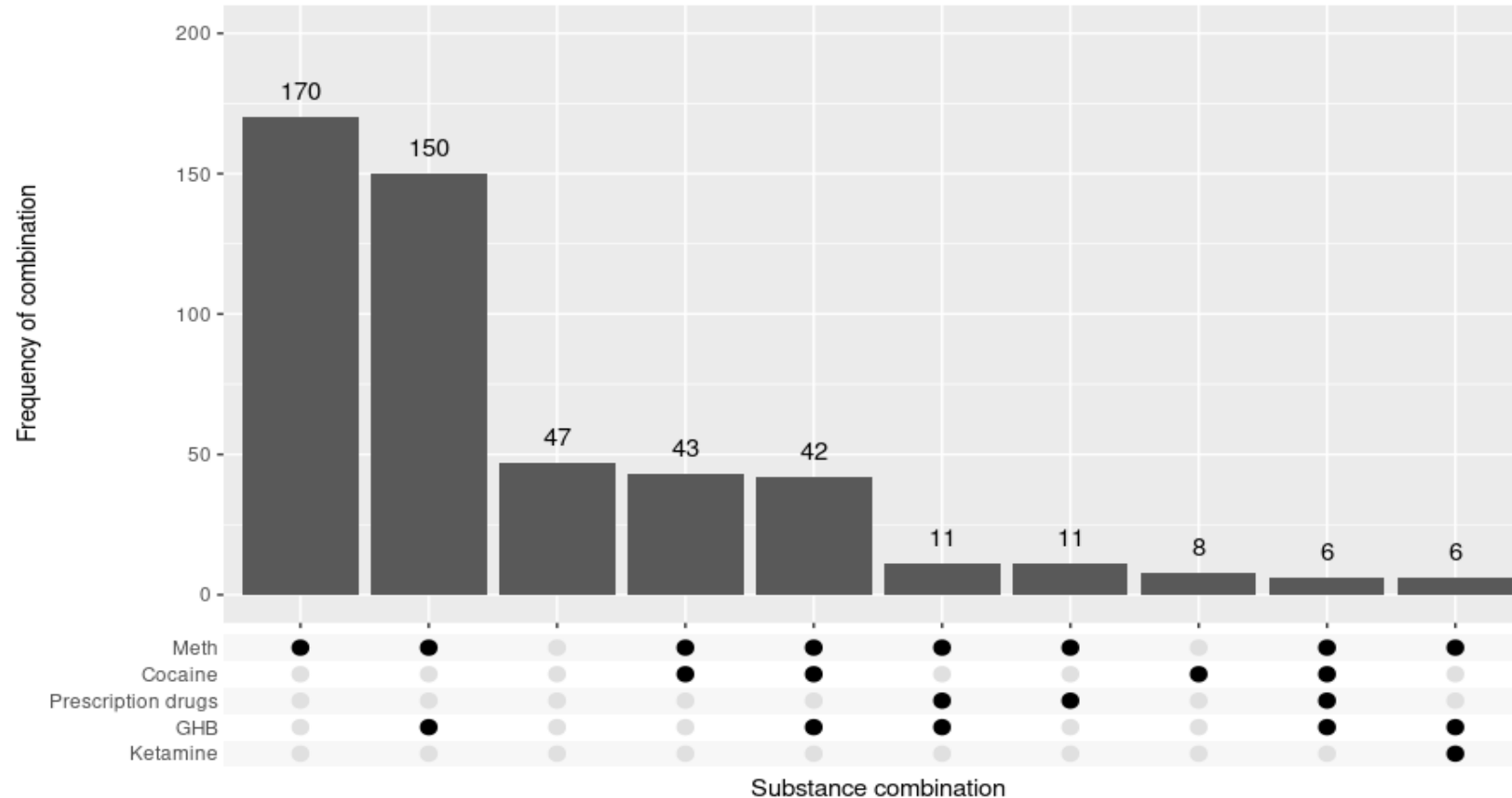
- ▶ Thank you to the organizations included in this evaluation:
 - ▷ Housing Works NYC
 - ▷ GMHC
 - ▷ The Center
- ▶ Thank you to my co-authors Connor Reynolds, Noelisa Montero, Emma Ramsdell, Frances Silva, and Cristina Rodriguez-Hart for their excellent and hard work on this project
- ▶ Thank you to Mary Irvine for her helpful feedback on the project

Q&A

Additional Slides: Polysubstance Use

Polysubstance Use among Program Participants, 2017-2022 (N = 545)

10 most frequent combinations of substances used in past three months



Chemsex is commonly defined as intentional sex under the influence of psychoactive drugs, typically crystal meth or mephedrone in combination with GHB/GBL.