



IAS 2019

10TH IAS CONFERENCE ON HIV SCIENCE

Mexico City, Mexico  21-24 July 2019



IAS 2019

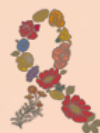
10TH IAS CONFERENCE ON HIV SCIENCE
Mexico City, Mexico 21-24 July 2019

Lost in Translation: PrEP Implementation & Transgender People

Asa Radix, MD, MPH

 @AsaRadix

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Disclosures

- No Conflicts of Interest to Disclose



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Sex & Gender

- Sex
 - Assigned at birth: male, female
 - Based on biology: anatomy, chromosomes, hormones
- Gender Identity
 - One's sense of self as a gendered or non-gendered person (man, woman, both, neither)
 - Children aware of gender differences by ages 1-3 years
 - Can label themselves boy/girl by age 3
 - Gender constancy age 4

Campbell et al., *Br. J. Psychol*, 2002; Zosuls et al., *Dev Psychol* 2009;
Martin et al., *Annu Rev Psychol* 2010; Zmyj & Bischof-Köhler, *J Cognition Dev* 2015



Transgender Populations

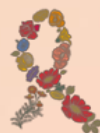
- People whose gender identity or expression is different from their sex assigned at birth
- Cultural/linguistic differences
- **Transgender women:** people who were assigned male at birth but identify as women
- **Transgender men:** people who were assigned female at birth but identify as men
- **Other genders:** nonbinary, genderqueer, gender nonconforming, agender, gender expansive

two spirit travesti
meti waria hijra
kothi fa'afafine
travesti kinnar
genderqueer
transpinoy aravani
aruvani jagappa
shiv-shakthis jogti
hijras third gender
trans thirunangi

Global Estimates of Transgender Persons

- Approximately 25 million transgender people worldwide
- USA
 - 1 million trans adults (0.4%)
 - 2% of US high school students
- Europe (UK, Belgium, Netherlands) 0.6-0.9%

Winter S, Lancet. 2016; Meerwijk & Sevelius. AJPH, 2017; Johns MM, MMWR 2019; Glenn & Hurrell, Equality and Human Rights Commission 2012; Kuyper and Wijsen, Arch Sex Behav 2014; Van Caenegem et al. Arch Sex Behav 2015; Winter, et al. Lancet 2016



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35% trans youth bullied in schools
– Johns MMWR 2019

47% face family rejection
– USTS 2015

40% reported ever attempting suicide
10% within the last year
– USTS 2015, Bauer 2015

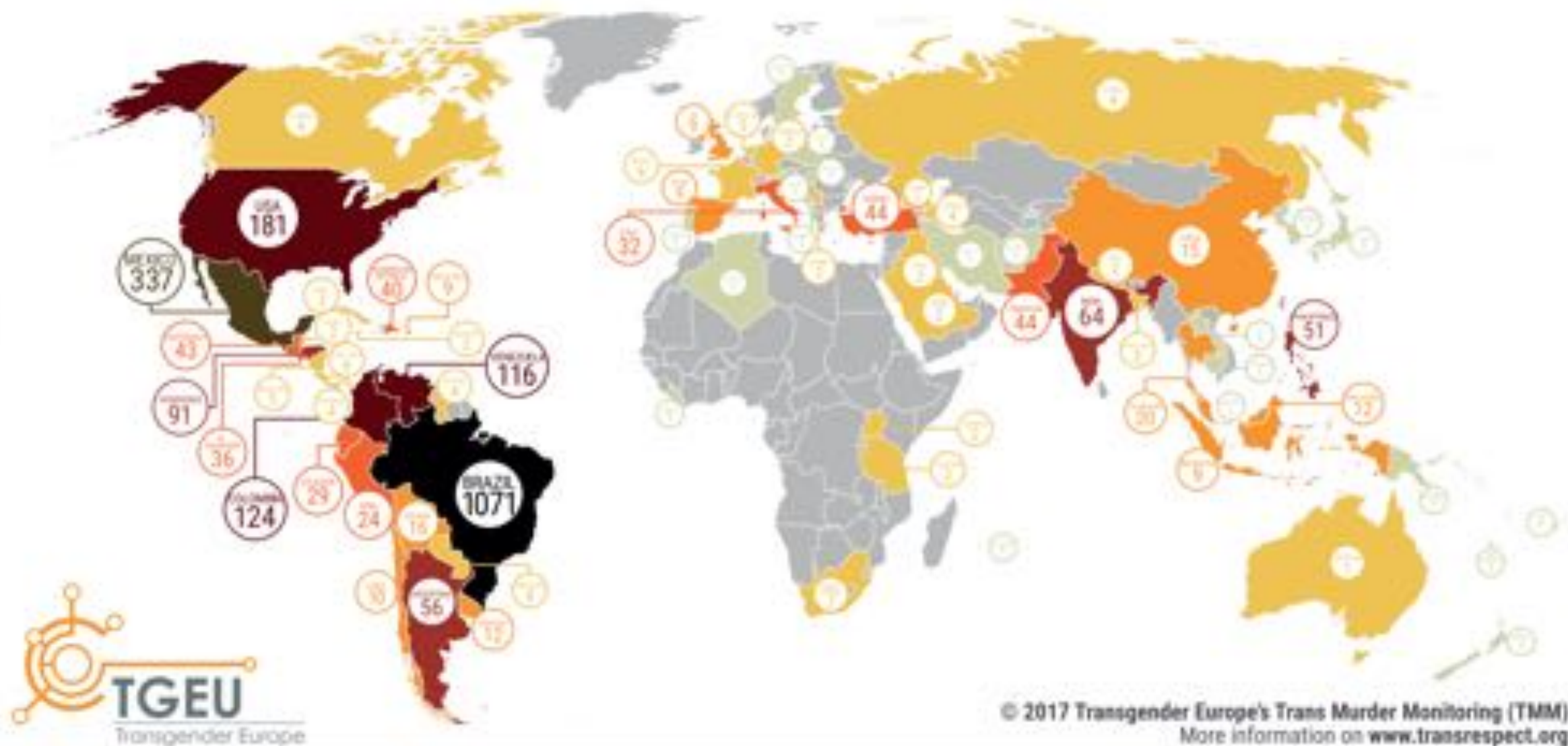
29% live in poverty
– USTS 2015

14% experienced homelessness
– USTS 2015

**1 in 3 faced discrimination in
healthcare settings**
– USTS 2015

**1 in 4 avoided medical care due to
fear of mistreatment**
– USTS 2015

2609 reported murders of trans and gender-diverse people in 71 countries worldwide
(1 January 2008 – 30 September 2017)








© 2017 Transgender Europe's Trans Murder Monitoring (TMM)
More information on www.transrespect.org

Absolute numbers: No data, 1, 2-8, 9-20, 21-50, 51-100, 101-250, 251-500, >500

<https://transrespect.org/en/trans-murder-monitoring/tmm-resources/>

Summary of the Global HIV Epidemic (2017)

	People living with HIV in 2017	People newly infected with HIV in 2017	HIV-related deaths 2017
 Total	36.9 million [31.1 million – 43.9 million]	1.8 million [1.4 million – 2.4 million]	940 000 [670 000 – 1.3 million]
 Adults	35.1 million [29.6 million – 41.7 million]	1.6 million [1.3 million – 2.1 million]	830 000 [590 000 – 1.2 million]
 Women	18.2 million [15.6 million – 21.4 million]	–	–
 Men	16.8 million [13.9 million – 20.4 million]	–	–
 Children (<15 years)	1.8 million [1.3 million – 2.4 million]	180 000 [110 000 – 260 000]	110 000 [63 000 – 160 000]

Source: UNAIDS/WHO estimates



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“What message are we sending to young people who are trans and gender-nonconforming when we don’t even count them?
We suggest that their identities don’t even matter.”

- Laverne Cox 2015



Global Burden of HIV in Transgender Women

THE LANCET Infectious Diseases

Volume 13, Issue 3, March 2013, Pages 214-222



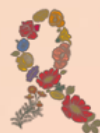
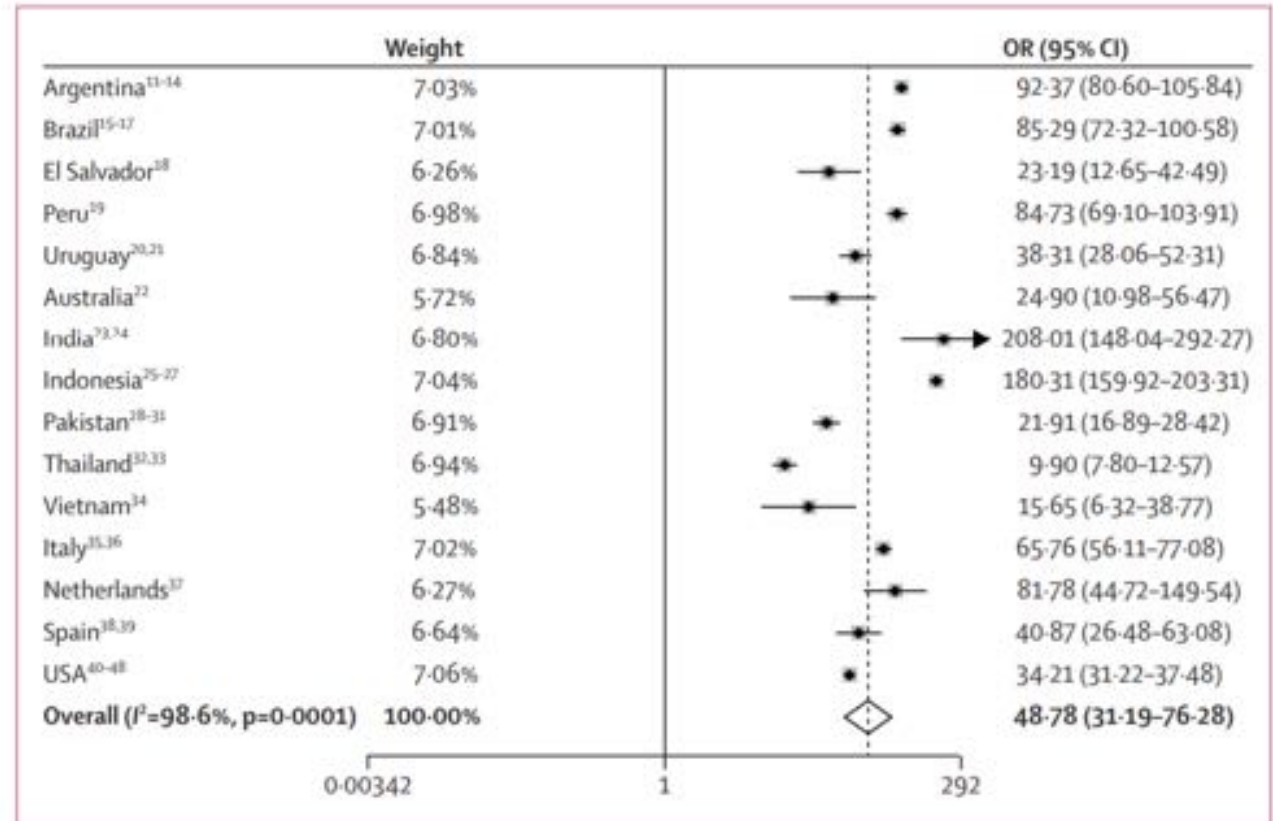
Articles

Worldwide burden of HIV in transgender women: a systematic review and meta-analysis

Dr Stefan D Baral MD^{a, c, d, e}, Tonia Poteat PhD^b, Susanne Strömdahl MD^{a, c}, Andrea L Wirtz MHS^a, Thomas E Guadamuz PhD^d, Prof Chris Beyrer MD^a

39 studies, 15 countries:
Pooled HIV prevalence of 19.1% (95% CI 17.4–20.7) in 11,066 transgender women worldwide

OR 49-fold higher than general population



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Global burden of HIV among Transmasculine Persons

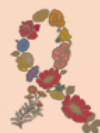
- Quantitative data very limited^{1,2}
 - Lab-confirmed HIV+: 0-4%
 - Self-report: 0-10%
- Choosing the right denominator
 - e.g., 63% of trans men identified as gay, bi, queer but only 1/3 of this group had sex with cis men³



¹ Reisner & Murchison. *Global Public Health*. 2016.

² Poteat et al. *JAIDS*. 2016.

³ Scheim et al. *JAIDS*. 2017.



HIV Incidence Transgender Women

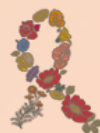
- Spain: 1.2/100 p-y
- Peru: 2.3/100 p-y
- USA: 2.8/100 p-y
- iPrEX: 3.6/ 100 p-y
- Argentina: 10.7 per 100 p-y
- Kenya 20 per 100 p-y

Criteria for PrEP

WHO 2015:
Incidence > 3 per 100
person-years

IAS-USA guidelines:
Incidence > 2 per 100
person-years

Castillo R, JAIDS 2015; Diez M, Euro Surveill. 2014; Buchbinder SP, Lancet Infect Dis. 2014; Nuttbrock L, AIDS Behav. 2015; Buchbinder SP, Lancet Infect Dis. 2014; Kimani M JIAS 2019



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PrEP: Results from Clinical Trials

Clinical trial	Participants	Number	Drug	Modified ITT efficacy of % reduction in acquisition of HIV infection ^a		Adherence-adjusted efficacy based on drug detection in blood ^b	
				%	(95% CI)	%	(95% CI)
iPrEx	Men who have sex with men & transgender women	2499	FTC-TDF	44	(15-63)	92	(40-99)
Partners PrEP	HIV discordant couples	4747	TDF	67	(44-81)	86	(67-94)
			FTC-TDF	75	(55-87)	90	(58-98)
TDF2	Heterosexually active men and women	1219	FTC-TDF	63	(22-83)	85 ^c	NS ^c
Bangkok Tenofovir Study	Injection drug users	2411	TDF	49	(10-72)	74	(17-94)
Fem-PrEP	Heterosexually active women	2120	FTC-TDF	NR	----	NR	----
VOICE	Heterosexually active women	5029	TDF FTC-TDF	NR	----	NR	----

a. Excluded only those enrolled patients later found to be infected at randomization and those with no follow-up visit or HIV test.

b. The percentage of reduction in HIV incidence among those with tenofovir detected in blood, compared with those without detectable tenofovir.

c. Finding not statistically significant.

US Public Health Services. Pre-exposure Prophylaxis for The Prevention Of HIV Infection In The United States, 2014.

<http://www.cdc.gov/hiv/pdf/guidelines/PrEPguidelines2014.pdf>.

PrEP Efficacy in Transgender Women

THE LANCET



296 identified as trans

29 as women

14 as men but using feminizing hormones

339 (14%)

tra
of the iPrEx trial

Dr Madeline B Deutsch MD ^a  , Prof David V Glidden PhD ^a, Jae Sevelius PhD ^a, Joanne Keatley MSW ^a, Vanessa McMahan MS ^b, Juan Guanira MD ^c, Esper G Kallas MD ^d, Prof Suwat Chariyalertsak MD ^e, Prof Robert M Grant MD ^{a, b, f}  , iPrEx investigators [†]

- Trans women: 339/2499 (14%)
- Lack of efficacy: HR 1.1
 - Low adherence to TDF 18%
 - TFV-DP detected in no trans women at seroconversion
 - No seroconversions observed in trans women with TDP levels on ≥ 4 pills/week
 - Hormone use associated with lower TFV-DP levels

Adherence? Interactions?

PrEP Efficacy in Transgender Women

JIAS | JOURNAL OF THE
INTERNATIONAL AIDS SOCIETY

Open Access



Decreased Tenofovir Diphosphate
Concentrations in a Transgender Female
Cohort: Implications for Human

Estrogen levels do not change with TDF/FTC

Serum tenofovir levels are reduced in the presence of estrogen

Clinical significance is not known

**Transgender women on hormones may need greater adherence to
oral PrEP**

Observed Dosing When Compared to Cis Men

Eugenie Shieh¹, Mark Marzinke¹, Edward Fuchs¹, Rahul Bakshi¹, Aung Wutyi¹, Tonia Poteat², Todd Brown¹, Namandje Bumpus¹, Craig Hendrix¹ ¹Johns Hopkins University School of Medicine, United States, ²Johns Hopkins Bloomberg School of Public Health, United States

More to Consider

The screenshot shows the homepage of the journal 'Clinical Chemistry'. At the top, there is a large red banner with the journal title 'Clinical Chemistry' in white. To the right of the banner is a search bar with the placeholder text 'looking for something?'. Below the banner is a navigation menu with links for 'Home', 'About', 'Articles', 'Info for', 'Resources', 'Abstracts', 'Submit', and 'Contact'. The 'Articles' link is highlighted. Below the navigation menu, the page is categorized as 'Research Article | Article'. The main title of the article is 'The Vaginal Microbiome of Transgender Men'. Below the title, the authors are listed: Gabrielle Winston McPherson, Thomas Long, Stephen J. Salipante, Jessica A. Rongitch, Noah G. Hoffman, Karen Stephens, Kelsi Penewit, and Dina N. Greene. The DOI is 10.1373/clinchem.2018.293654 and it was published in January 2019.



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More to Consider

Woman Killed 22-Year-Old With Silicone Butt Injections, Police Say

By Murray Weiss, Danielle Teholakian and Aidan Gardiner | March 11, 2014 9:31am |

Updated on March 11, 2014 2:45pm

MANHATTAN — A woman who fatally injected a 22-year-old mother's buttocks with silicone at a pay-by-the-hour Meatpacking District hotel left her patient writhing and foaming at the mouth for 90 minutes before summoning help, sources said.

Tamira M. Mobley, a 28-year-old from Wood Ridge, N.J., was arrested Monday and accused of killing [Tamara Blaine](#), who was found convulsing on a bed inside a second-floor room at the [Liberty Inn Hotel](#), at 51 10th Ave., at 12:33 p.m. on July 8, police said.

Blaine, whose obituary listed her as a college freshman at the time, was taken to St.



Tamara Blaine, 22, died in July after she suffered a bad reaction...

← View Full Caption

Facebook/Tamara Blaine





**Assess PrEP
Eligibility**



**Linkage to
PrEP**



**Initiation of
PrEP**



Retention



**Adherence &
Persistence**

PrEP Care Continuum

LITE Study*

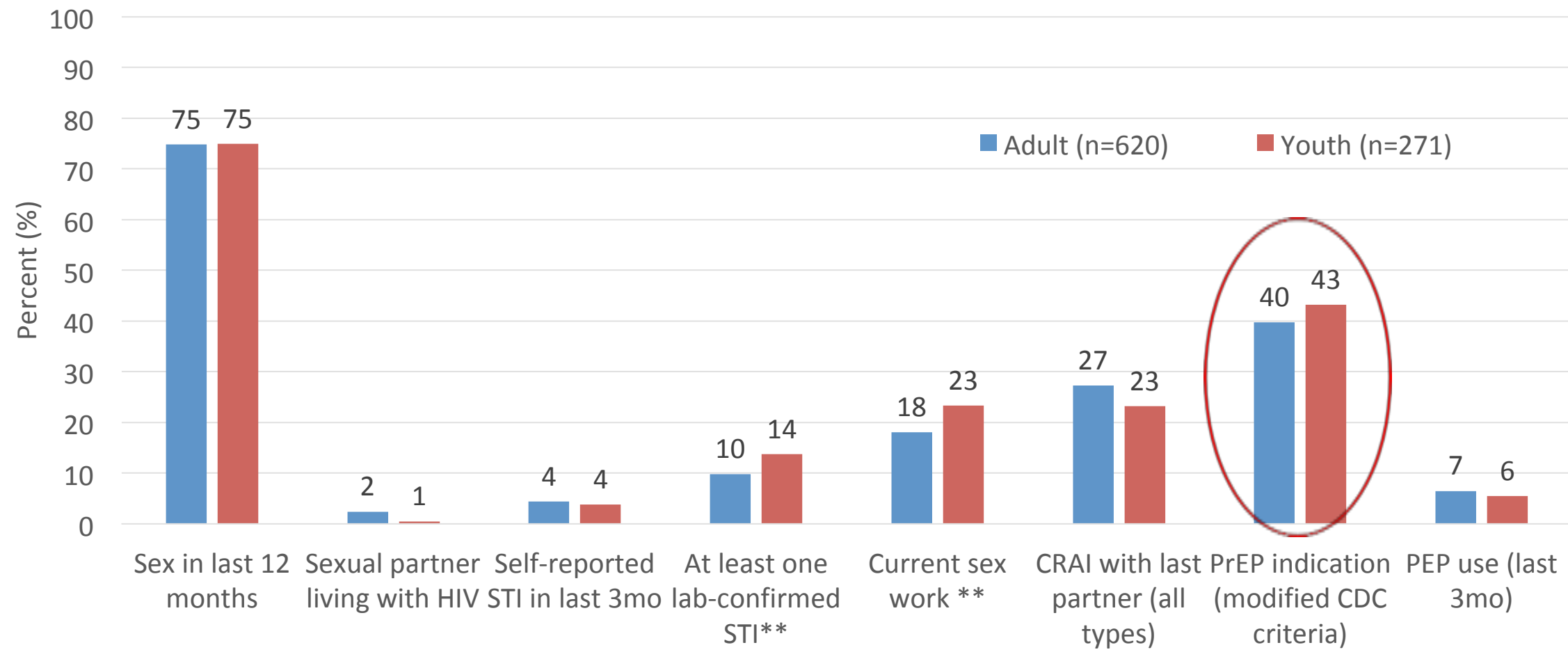
- Enrollment: 1,100 HIV uninfected transgender women in 6 cities, eastern and southern United States
- Study visits: every 3mo. for 24 months (facility-based or online)
 - Survey + oral HIV testing every 3 months
 - STI testing inc. self-collected swabs every 12 months
- App-based GPS data collection



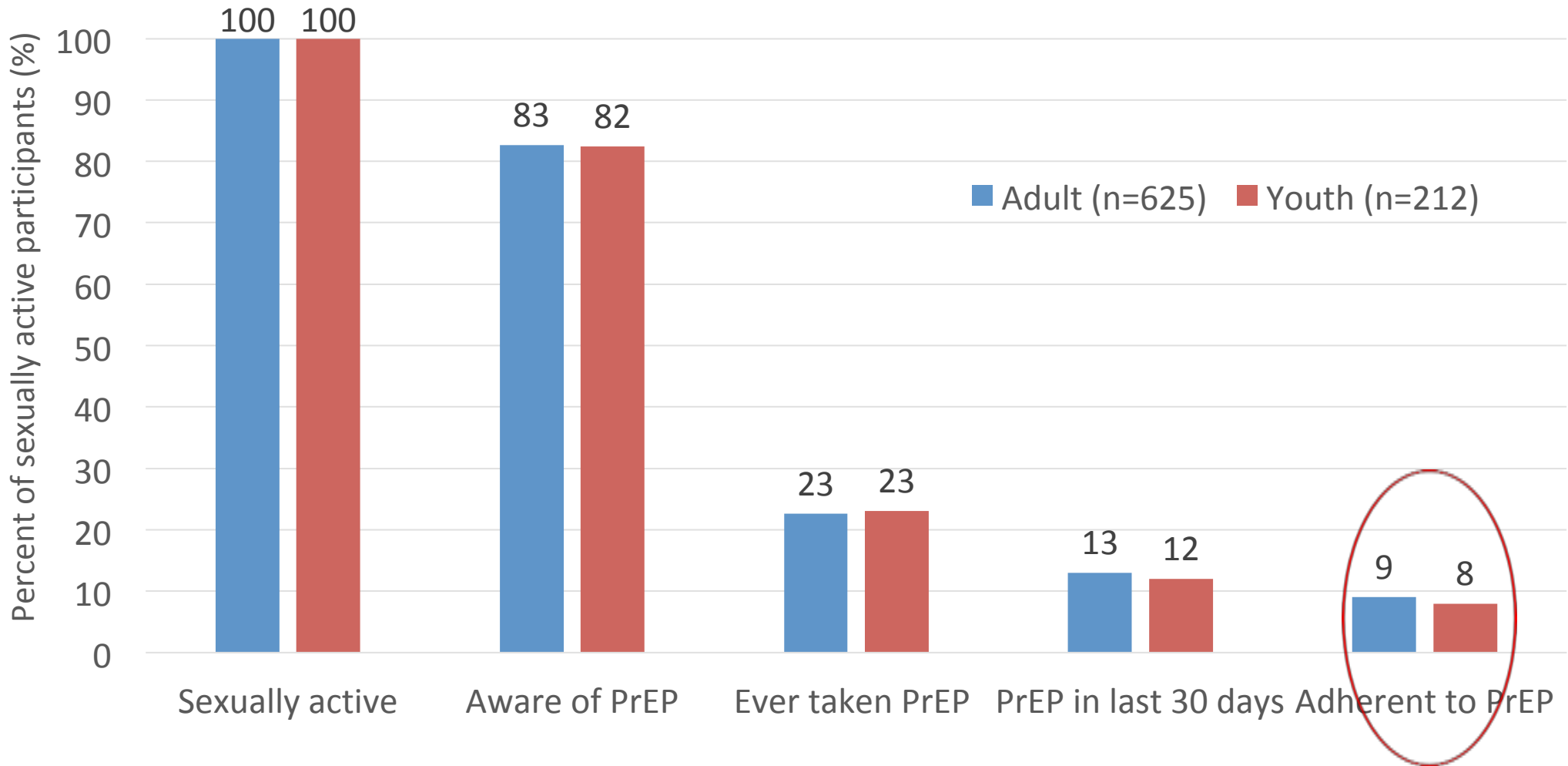
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*Leading Innovation for Transgender Women's Health and Empowerment

Indications for PrEP among LITE Participants



PrEP continuum among Transgender Women

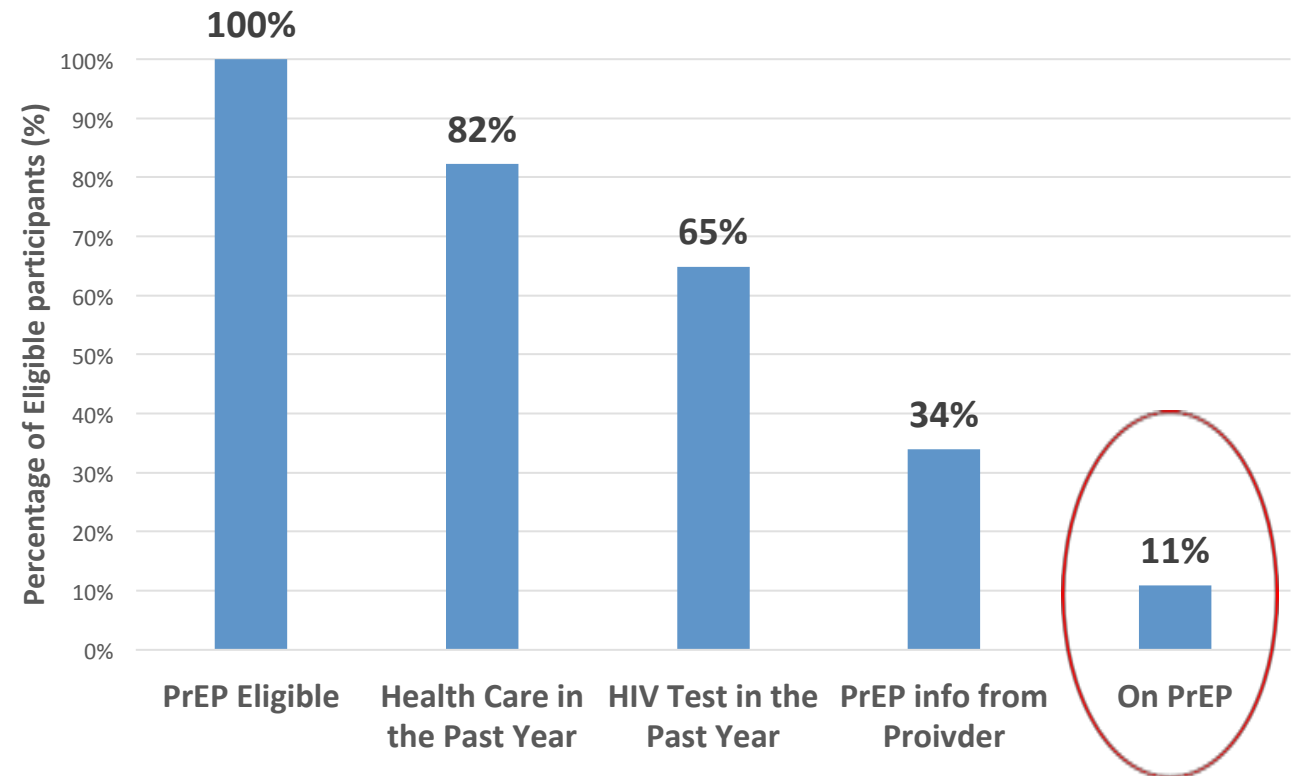


*Poster TUPEC482

PrEP Continuum for Transgender Men

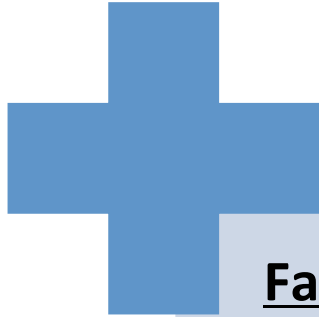
- USA online survey conducted (2017) among 1808 transmasculine individuals, ages 18-60
- Almost one quarter of the sample (n = 439; 24.3%) met one or more criterion for PrEP

N=1808	#	%
Any Condomless receptive anal or vaginal sex	130	18.3%
Condomless receptive anal sex	129	7.1%
Condomless vaginal receptive sex	290	16.0%
STI history in past year	99	5.5%
Sex work in past 6 months	62	3.4%
Heroin use	5	0.3%
5 or more cismale/trans female partners in past year	103	5.7%
PrEP Eligible	439	24.3%



Golub & Klein, JAIDS 2019

Barriers/Facilitators for PrEP in Trans People



Facilitators to PrEP

- Transgender-inclusive and gender affirming sexual health
- Trans-competent providers
- Materials/health promotion
- Hormones prescribed at clinic
- Active provider engagement and assistance around PrEP
- Community mobilization

Barriers to PrEP

- Conflating TW with MSM
- Mistrust of providers
- Worried about side effects
- Low HIV-risk perception
- HIV stigma
- Lack of trans-inclusive marketing
- Concerns about hormone interactions
- Consent (minors)
- Pill size

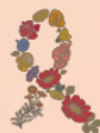
Affirming Spaces



Tangerine Clinic, trans-led hormone integrated sexual health, Thailand

First impressions are important

- Assess and change current clinical environment
 - Intake forms inclusive of multiple gender identities and sexualities
 - Affirm gender: Use chosen names and pronouns
 - Knowledgeable providers
 - Assess psychosocial/material needs
 - Use trans images - on education materials, brochures, website
 - Gender neutral/inclusive bathrooms
 - Hire trans-identified staff





Gender Identity:

- Male/Man
- Female/Woman
- TransMale/TransMan
- TransFemale/TransWoman
- Genderqueer/Gender nonconforming
- Something Else
- Decline to Answer

Sex Assigned at Birth:

- Male
- Intersex
- Female
- Decline to Answer

HIV Screening

TA
Sys

Ge
Tra
Tra
Cis
Cis

“Girls like us are embracing our identity and taking charge of our own lives. That’s why HIV testing is an important part of my routine.”
— Prado

I’M DOING IT
Testing for **HIV**

#DoingIt

Testing is Fast, Free, and Confidential | cdc.gov/DoingIt

CDC ACT UP! AIDS

APRIL 18TH, 2019

**NATIONAL
TRANSGENDER
HIV
TESTING DAY**

#TRANSHIV

ry

ry

Protect Yourself From HIV and Other STIs

- Get tested regularly for HIV and other STIs. You may have an STI, even if you don’t have any symptoms.
- If you are concerned about exposure to HIV, talk to your provider about PrEP and PEP.
PrEP (pre-exposure prophylaxis) is a daily pill that can protect you against HIV.
PEP (post-exposure prophylaxis) is an emergency medicine that can stop HIV if started right after a possible exposure.
- If you have HIV, get treatment. The sooner you begin treatment, the less HIV will damage your body. And if you take your HIV medications every day, you are much less likely to pass HIV to your partners.

PLAY SURE

HIV Testing Among Transgender Women and Men — 27 States and Guam, 2014–2015 (Pitasi MA, et al MMWR 2017)



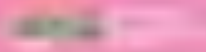
Miéstrate al destiñuda

El destiñuda es un programa de apoyo que ayuda a las personas a superar la adicción a la heroína y a la cocaína. El programa ofrece apoyo emocional y práctico a las personas que están luchando con la adicción.

Si estás interesado en aprender más sobre el programa, llámanos al número 800-368-6778.

Call 800-368-6778 for more information.

www.211.org or www.211.org/espanol



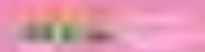
Bare all

Being healthy starts with taking your doctor's advice. That includes getting your HIV and drug use tests.

If you're not comfortable with your doctor, we can help.

Call 800-368-6778 for more information.

www.211.org or www.211.org/espanol



Scaling up PrEP



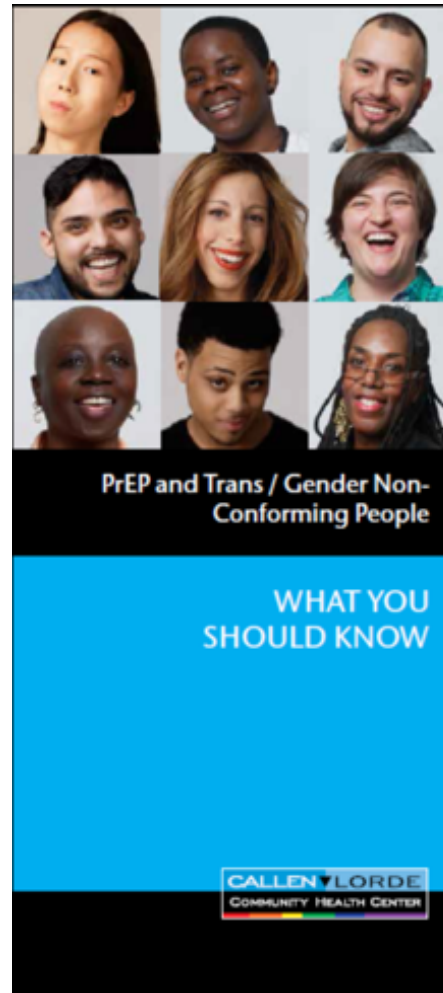
**ÚNICA
ATREVIDA Y
VIVIENDO SEGURA**

**DISFRUTA DEL SEXO CON UNA PREOCUPACIÓN MENOS.
PrEP PUEDE MANTENERTE VIH NEGATIVO.**

Si eres VIH negativo, PrEP es una pastilla diaria segura que te protege del VIH. PrEP no interfiere con tu tratamiento hormonal. Los condones ofrecen protección adicional contra otras infecciones de transmisión sexual (ITS).

DIVIÉRTETE: Habla con tu médico o visita nyc.gov/health y busca "PrEP".

NYC DEPARTMENT OF HEALTH & MENTAL HYGIENE



PrEP and Trans / Gender Non-Conforming People

WHAT YOU SHOULD KNOW

Calen Lorde
COMMUNITY HEALTH CENTER



**Pledge to be
PrEPared**
#PrEPpledge

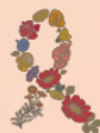
PrEP is a safe, daily pill that helps prevent HIV.
Learn more at PrEPpledge.com

Projects in Progress

- PrEP - 3 demonstration studies (18+)
 - TRIUMPH Project (“Trans Research-Informed communities United in Mobilization for the Prevention of HIV”)
 - The Stay Study: A Demonstration Project Advancing PrEP Delivery in the San Francisco Bay Area Transgender Community
 - iM-PrEPT! Study
- PrEP clinical observation studies
 - FIRED UP (“Furthering Investigation into Retention, Engagement and Dynamics of Utilization of PrEP”)
- HIV Testing
 - Project Moxie (trans youth 15-24)
- HPTN 091: Integrating HIV Prevention, Gender-Affirmative Medical Care, and Peer Health Navigation to Prevent HIV Acquisition

TRIUMPH

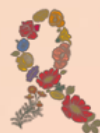
#STAYBEAUTIFUL
#STAYCONNECTED
#STAYAWARE
#STAYPREPARED
#STAYSEXY
#STAYSTUDY



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Take Home Messages

- Trans people experience disproportionate risk for HIV
- Challenges exist with HIV prevention access
- Gender affirmative care essential to PrEP scale-up
- What is needed
 - Uniform collection of gender identity data
 - Meaningful inclusion of trans people in research
 - Not just about PrEP, understand social and structural vulnerabilities to HIV and PrEP access and uptake



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