



Swiss TPH



HIV: How to Reach the Most Vulnerable Populations

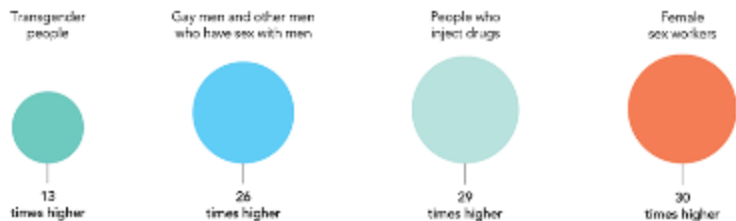
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Clinical Research Unit, Dept Medicine

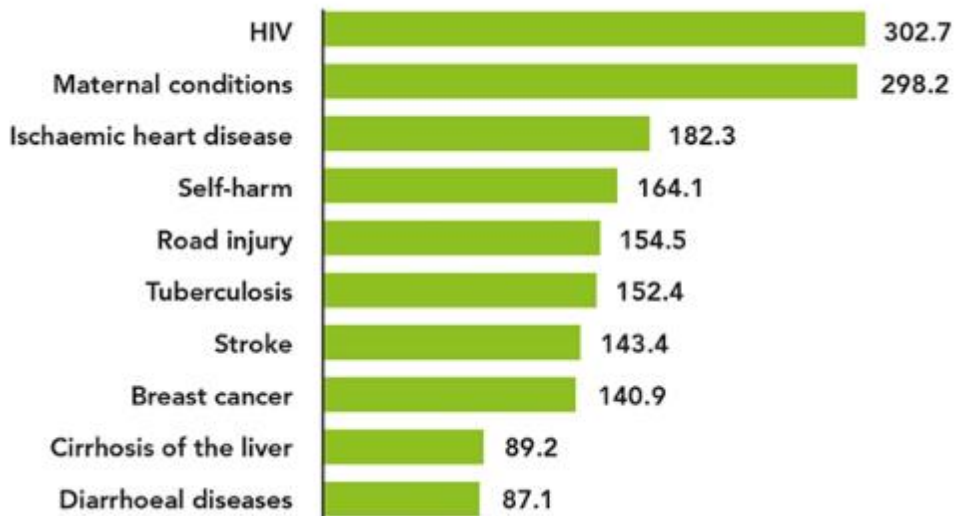
www.swisstph.ch/hiv-and-chronic-diseases

Who is vulnerable?

Key Populations globally



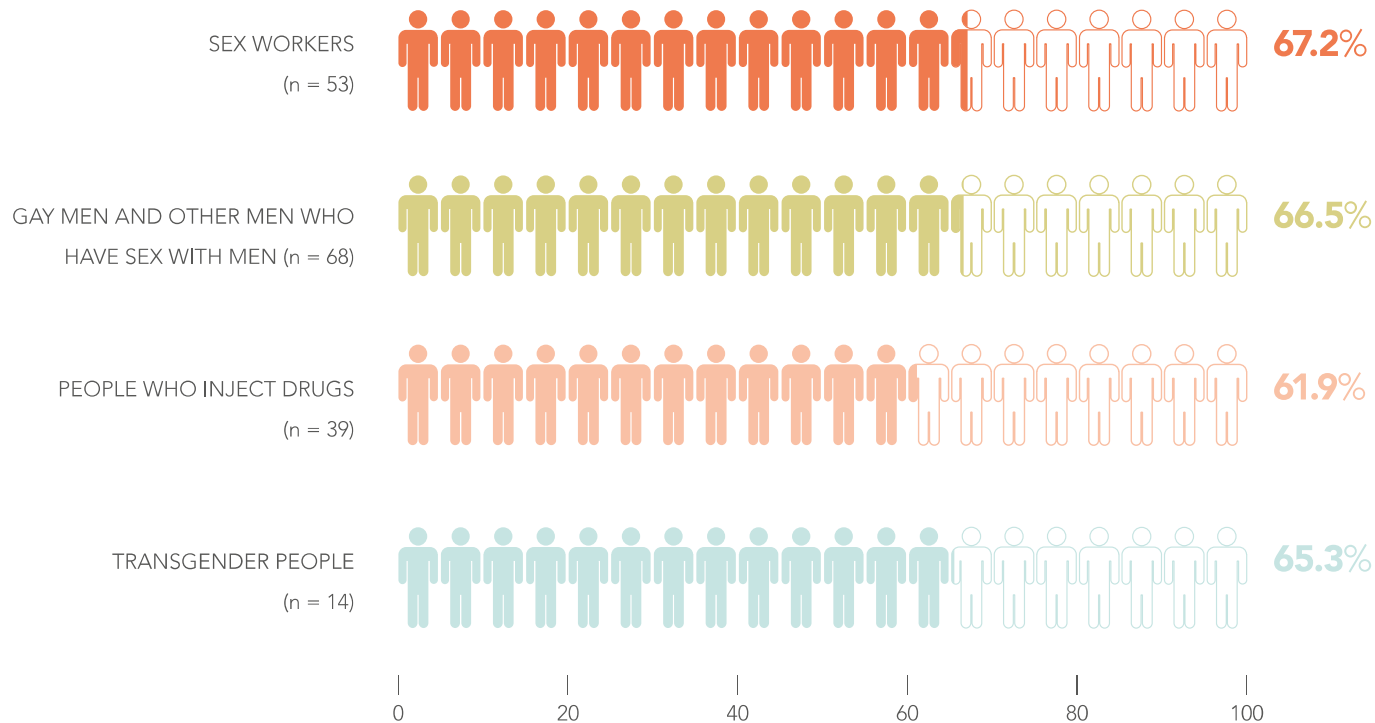
Girls and young women: key population in Africa



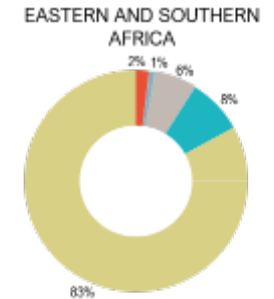
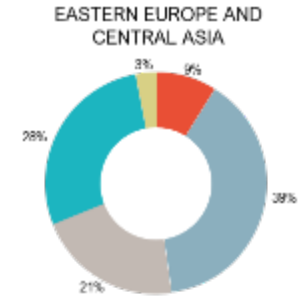
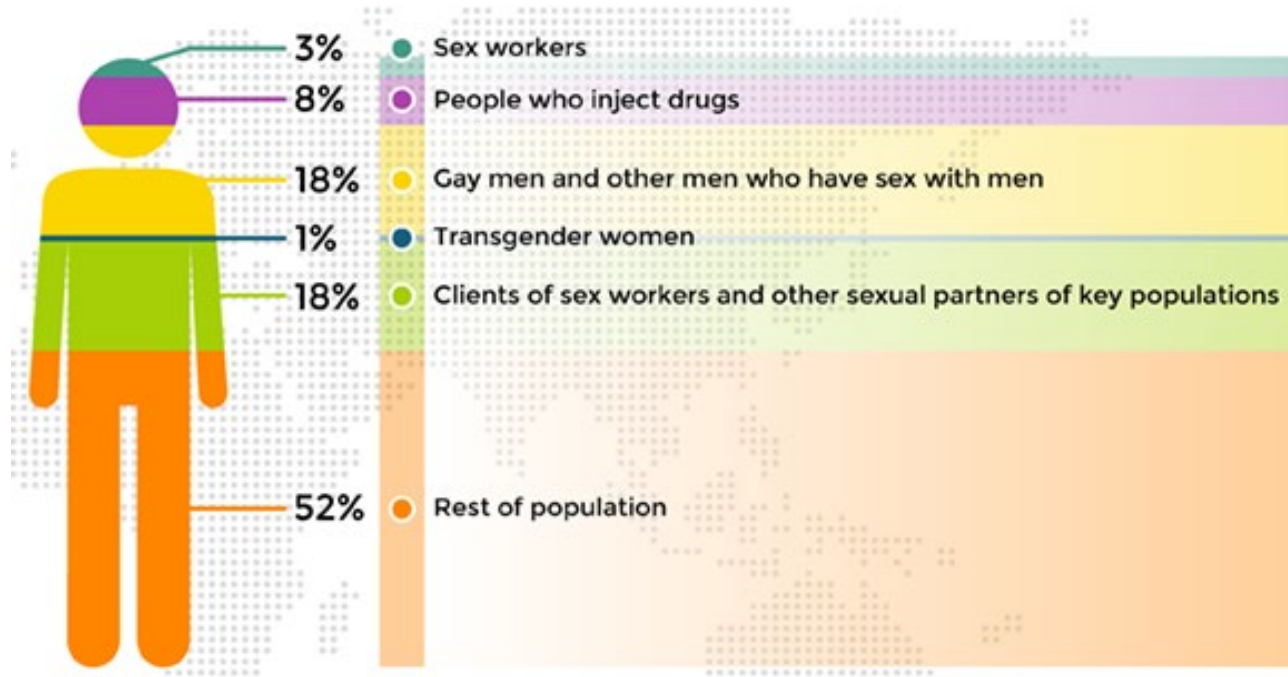
Risk of acquiring HIV as compared to background incidence

Causes of death in women 15-49 years globally

Key populations who know their status



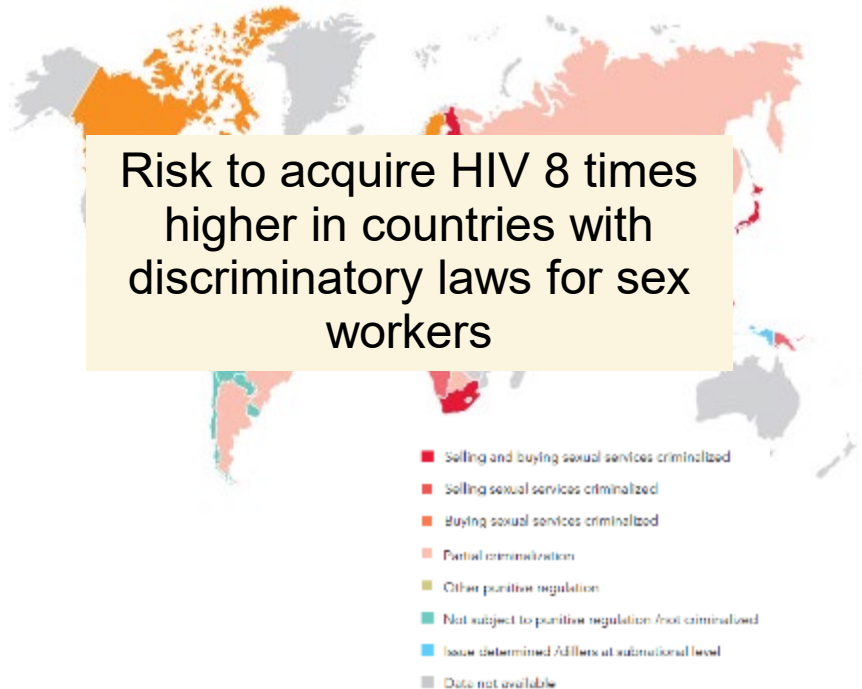
Global distribution of new infections



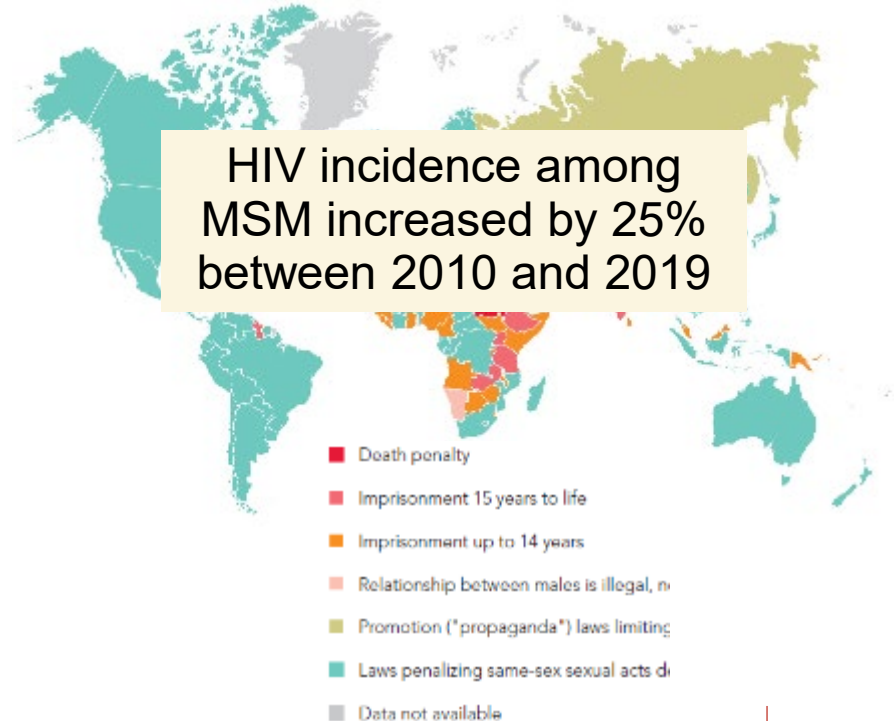
■ Rest of population†
 ■ Clients of sex workers and other sexual partners of key populations
 ■ Sex workers
 ■ People who inject drugs
 ■ Gay men and other men who have sex with men
 ■ Transgender women*

Reaching key populations: change policies and laws! (I)

Criminalization of sex work



Criminalization of same-sex relationships



4 Biomedical interventions for prevention



Pre-exposure prophylaxis (PrEP)



Treatment as prevention (TasP)

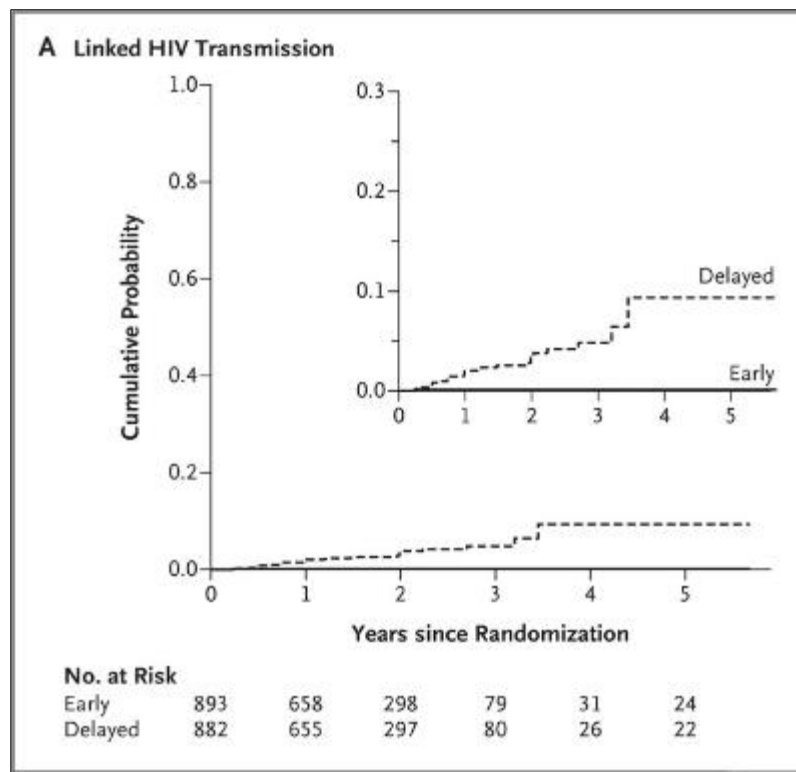


Condoms



Voluntary Male Medical Circumcision (VMMC)

Treatment is Prevention (1)



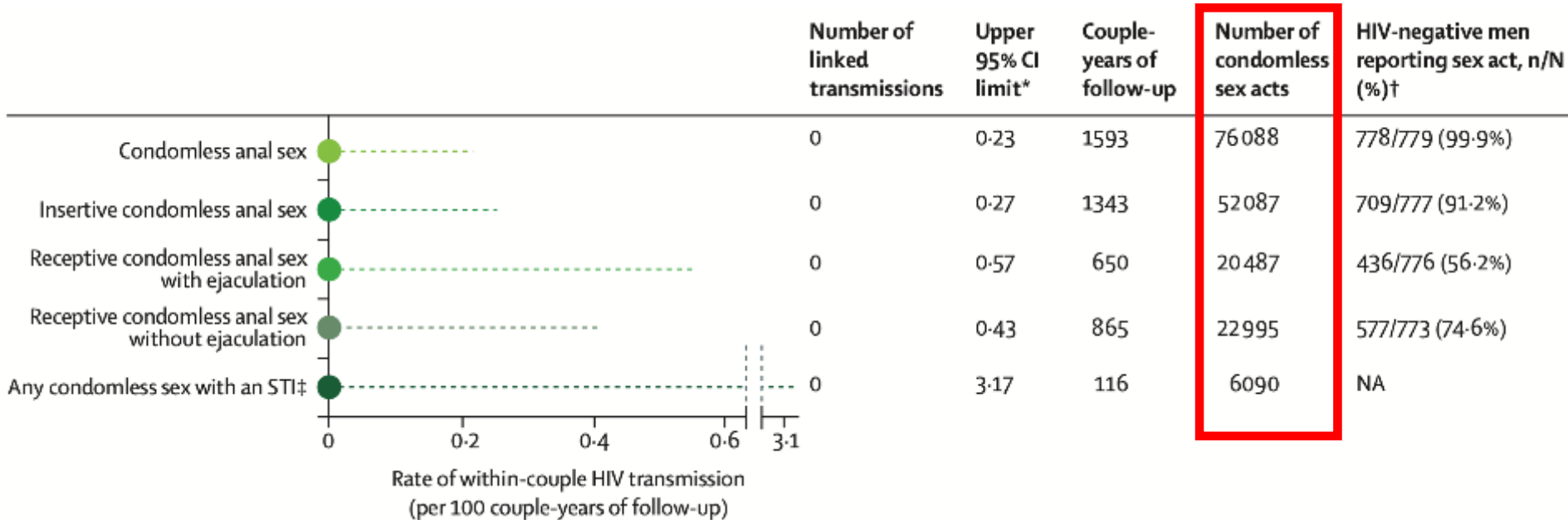
Cohen MS et al. N Engl J Med 2011;365:493-505.
Swiss TPH

	HIV-Negative Members of Eligible Couples Reporting Specific Sex Act, No./Total (%)	Couple-Years of Follow-up		Upper 95% Confidence Limit
All				
Any sex	863/866 (99.7)	1238		0.30
Vaginal sex	532/878 (60.6)	629		0.59
Anal sex	449/849 (52.9)	522		0.71
Insertive anal sex	363/862 (42.1)	417		0.88
Receptive anal sex with ejaculation	185/864 (21.4)	166		2.23
Heterosexual women				
Any sex	261/262 (99.6)	381		0.97
Vaginal sex with ejaculation	193/259 (74.5)	246		1.50
Vaginal sex without ejaculation	207/257 (80.5)	238		1.55
Anal sex	61/256 (23.8)	60		6.16
Receptive anal sex with ejaculation	37/255 (14.5)	29		12.71
Receptive anal sex without ejaculation	55/253 (21.7)	45		8.14
Heterosexual men				
Any sex	272/274 (99.3)	418		0.88
Vaginal sex	271/275 (98.5)	383		0.96
Anal sex	60/264 (22.7)	47		7.85
Insertive anal sex	60/264 (22.7)	47		7.85
Men who have sex with men				
Any sex	330/330 (100)	439		0.84
Anal sex	328/329 (99.7)	415		0.89
Insertive anal sex	303/329 (92.1)	370		1.00
Receptive anal sex with ejaculation	148/329 (45.0)	137		2.70
Receptive anal sex without ejaculation	217/324 (67.0)	220		1.68

Rate of Within-Couple Transmission, per 100 Couple-Years of Follow-up

JAMA. 2016;316(2):171-181. doi:10.1001/jama.2016.5148

Treatment is Prevention (2)

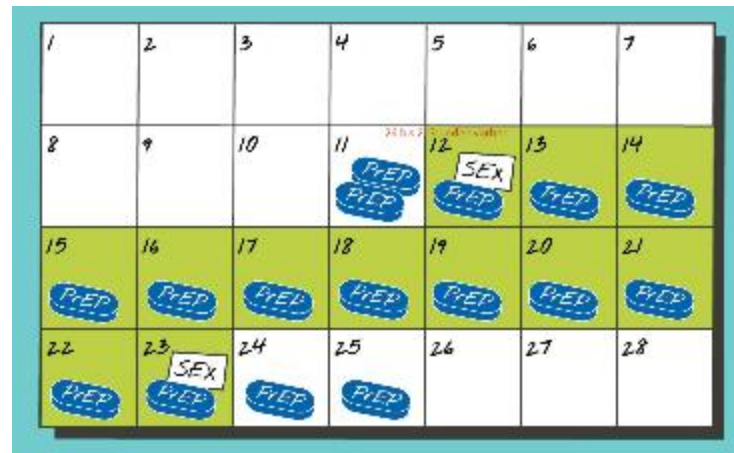
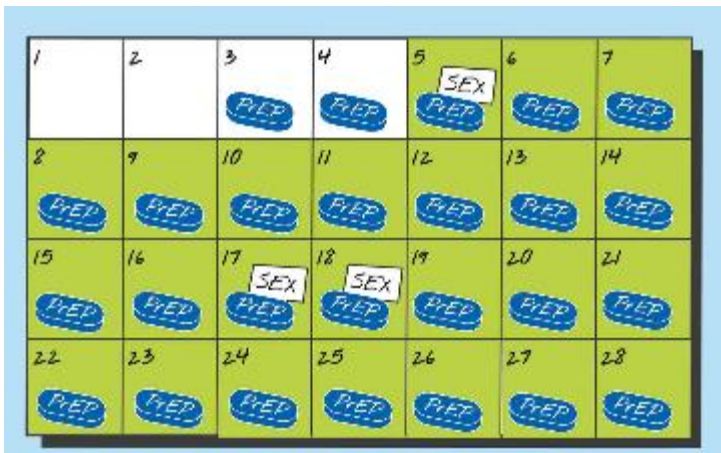


Lancet 2019; 393: 2428–38 [http://dx.doi.org/10.1016/S0140-6736\(19\)30418-0](http://dx.doi.org/10.1016/S0140-6736(19)30418-0)

PrEP with TDF/FTC:

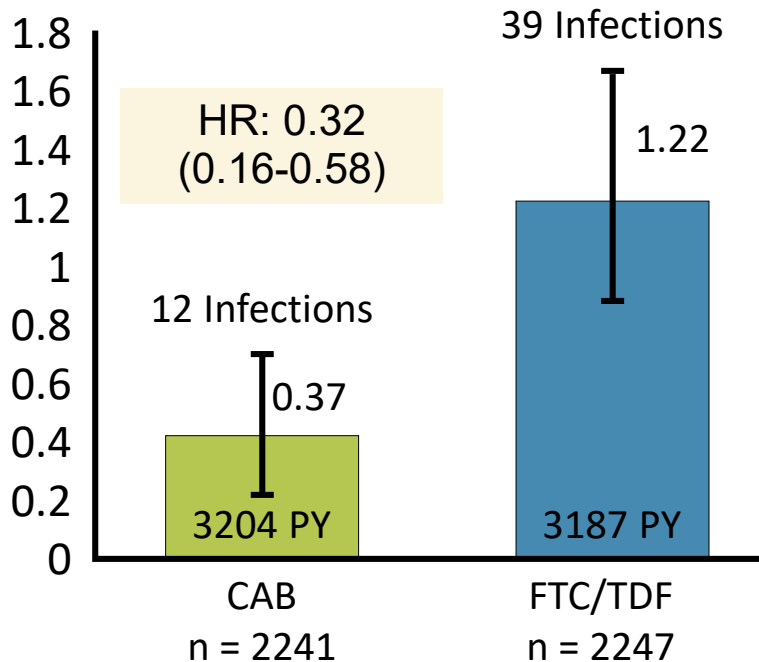
>90% efficacy

- lower efficacy in women
- challenge of long-term adherence



PrEP: Cabotegravir i.m. once every 2 months

HPTN 083: MSM and TGW



HPTN 084: Cisgender women

Characteristic	CAB (n = 1614)	TDF/FTC (n = 1610)
HIV infections, n	4	36
Person-yr	1953	1939
HIV incidence per 100 person-yr (95% CI)	0.2 (0.06-0.52)	1.86 (1.30-2.57)

Marzinke. CROI 2021. Abstr 153
Delany-Moretlwe. HIVR4P 2021. Abstr HY01-02

**I CAN
GIVE YOU
Honor,
Idealism,
Vitality.**



**I
CAN'T
GIVE U
HIV.**