

HIV Risk and Prevalence among Young Men who Have Sex with Men in NYC

Results from the
National HIV Behavioral Surveillance Study
among Young Men who Have Sex with Men
2014-2015



Background

- NYC has the largest population of men who have sex with men (MSM) of any U.S. city
- MSM are the largest risk group of people living with HIV/AIDS and people newly diagnosed with HIV
- In NYC in 2013, there were 87 newly diagnosed HIV cases among males 13-19 years of age; of these 74 (85%) were known to be MSM
- Gaps in knowledge exist on risk factors for HIV acquisition among young MSM (YMSM)

National HIV Behavioral Surveillance for Young Men who Have Sex with Men (NHBS-YMSM)

- Pilot project in 3 US cities: NYC, Chicago, and Philadelphia
- Funded by CDC, designed collaboratively
- Data collection period from Nov 2014 - Dec 2015
- Cross-sectional study design

NHBS-YMSM Objectives

- Determine the most effective sampling method(s) to reach YMSM
- Ascertain the feasibility of implementing each sampling method
- Evaluate the need to conduct ongoing HIV surveillance among YMSM by examining data related to HIV risk behaviors, HIV prevalence, HIV incidence, and other HIV-related outcomes

Eligibility Criteria

NYC NHBS-YMSM

- Born male, currently identifies as male
- Between the ages of 13 and 17 (extended to age 18 in Aug 2015)
- Live in NYC metropolitan statistical area (MSA)
- Ever had any sexual contact with another male or self-identified as gay or bisexual or reported same-sex sexual attraction
- Able to complete the survey in English

Sampling

NYC NHBS-YMSM

Two sampling methods were used to recruit YMSM:

- Venue-based sampling (VBS)
- Respondent-driven sampling (RDS)

Venue-Based Sampling (VBS)

NYC NHBS-YMSM

- Universe of YMSM-oriented venues constructed
 - *Service organizations, street locations, house ball events*
- Venues randomly selected, placed on monthly calendar
 - *Special events or venues also added non-randomly (eg. Pride)*
- Field team systematically approached persons at venue
- If agreed to, those approached were screened, and, if eligible, provided informed consent, were interviewed, and offered HIV testing and counseling
- Study incentives provided for the survey (\$50) and HIV test (\$25) in the form of gift cards

Respondent-Driven Sampling (RDS)

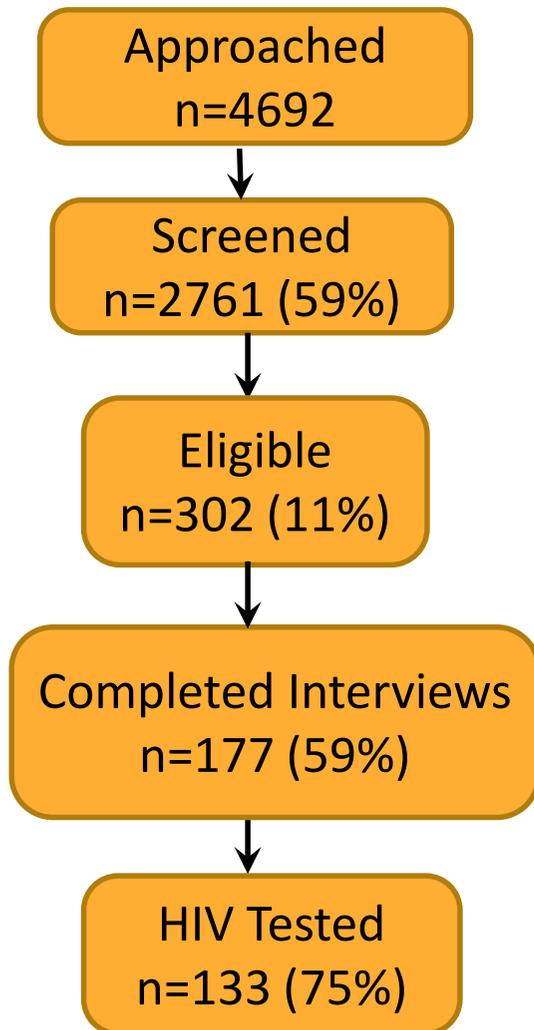
NYC NHBS-YMSM

- Study team recruited initial participants (“seeds”) through street and facility-based outreach
- Seeds then recruited up to 5 other participants who met the eligibility criteria
- Each of those 5 participants were offered to recruit up to 5 more participants, and so on until the target sample size was met
- Study incentives were provided for the survey (\$50), HIV test (\$25) and peer recruitment (\$20 per eligible participant)

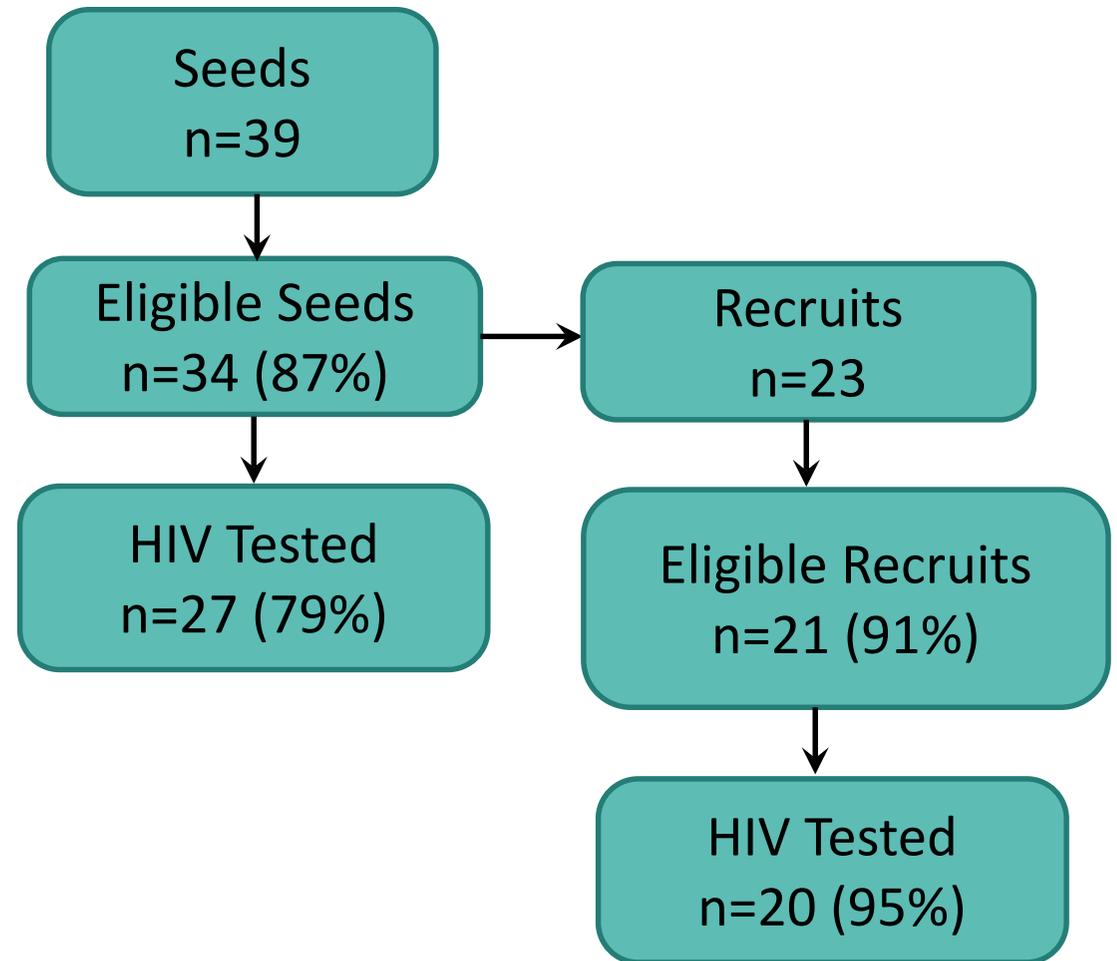
Study Sample

NYC NHBS-YMSM

VBS



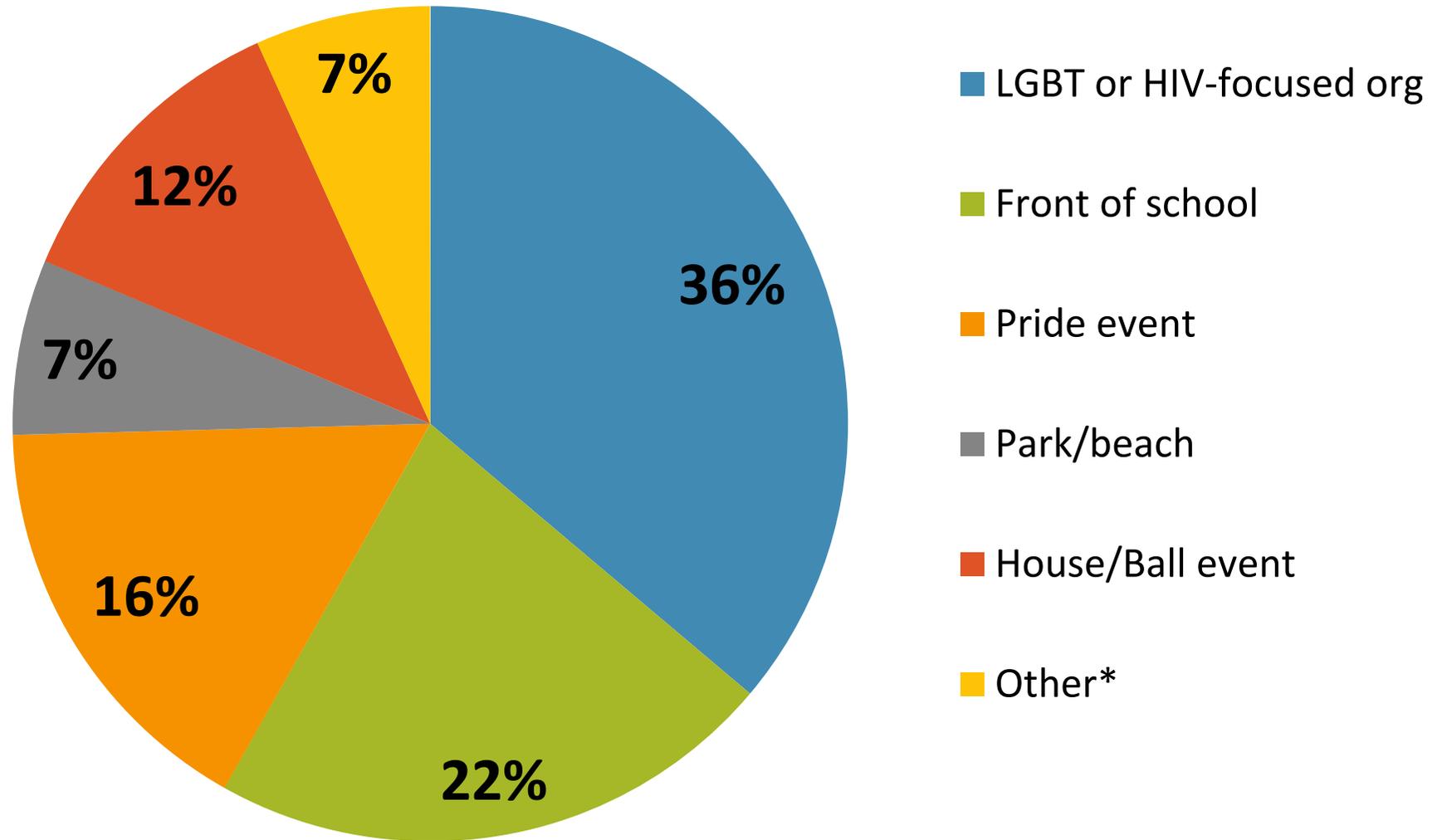
RDS



177 VBS + 55 RDS (34 Seeds & 21 Recruits) = 232 Total

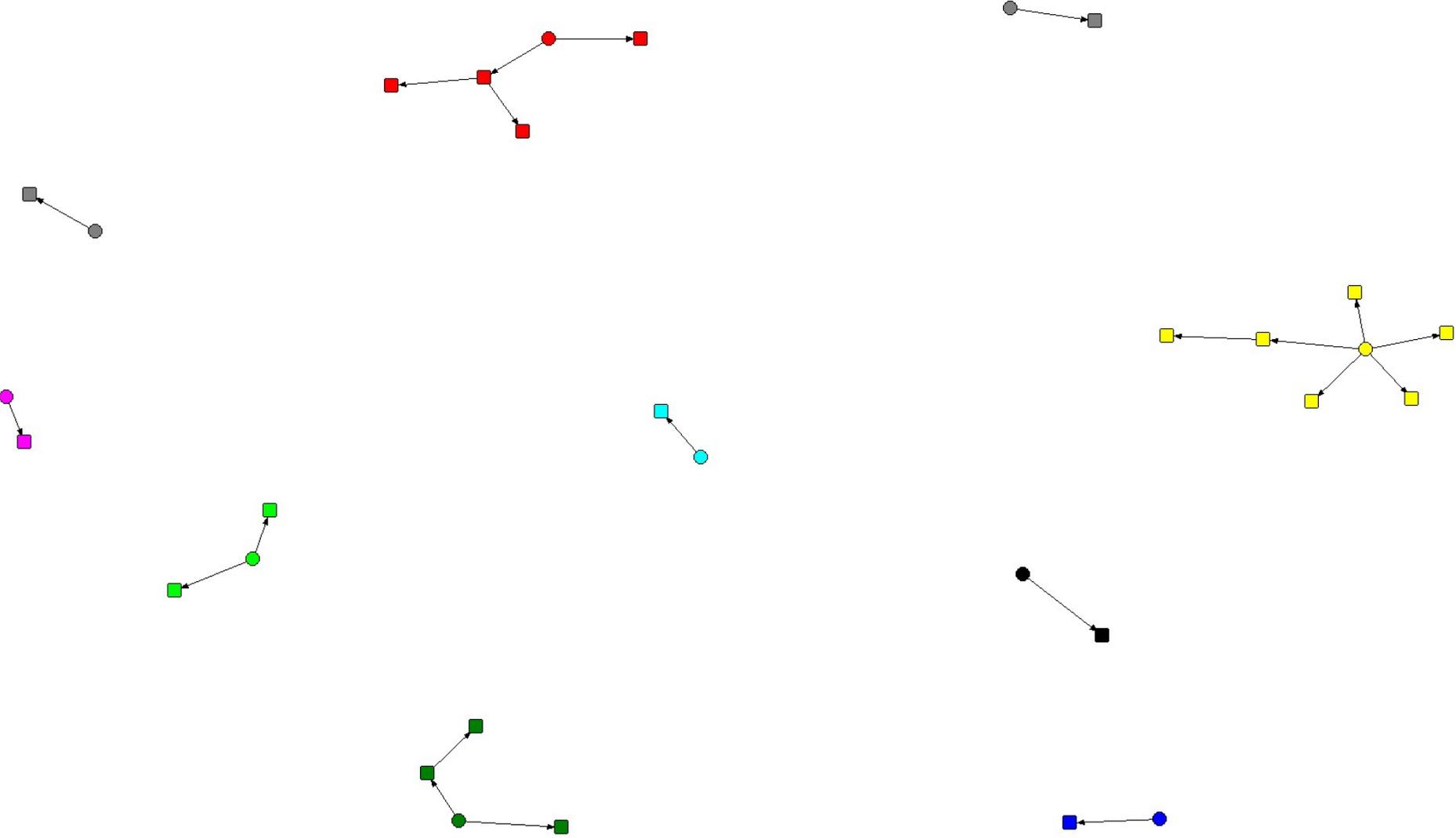
VBS Recruitment Venues

NYC NHBS-YMSM, n=177 (VBS recruits)



*Other includes street locations, non-LGBT events and malls

NHBS-YMSM RDS Recruitment Network Diagram



*Circles are network seeds

Statistical Analysis

NYC NHBS-YMSM

- Analyses combine both VBS and RDS as a convenience sample. Results are not generalizable to the larger population
- Basic descriptive frequencies of demographics, risks, and use of HIV testing and prevention services
- Chi-square tests (categorical variables) and Wilcoxon tests (non-normal continuous variables) were used to compare differences in HIV risks and use of HIV testing and prevention services
 - Most slides focus only on YMSM who did not self-report as HIV+ (n=226), since awareness of HIV infection influences risk
 - Some slides focus only on YMSM who did not self-report as HIV+ and who were sexually active (vaginal or anal sex; n=164).
- Overall prevalence of HIV infection determined by confirmed Western blot test among those who tested (n=177)

Demographics

NYC NHBS-YMSM, n=232

Race/Ethnicity

Black	33%
Hispanic/Latino	51%
White	13%
Other*	3%

Birthplace

United States	90%
Puerto Rico	3%
Foreign	7%

Age

13-15	22%
16-18	78%

Borough of Residence

Manhattan	29%
Bronx	25%
Brooklyn	25%
Queens	13%
Staten Island	4%
Outside of NYC, within MSA	3%

Demographics

NYC NHBS-YMSM, n=232

Sexual Identity

Gay	63%
Bisexual	32%
Heterosexual/Straight	3%

Jailed >24 hours

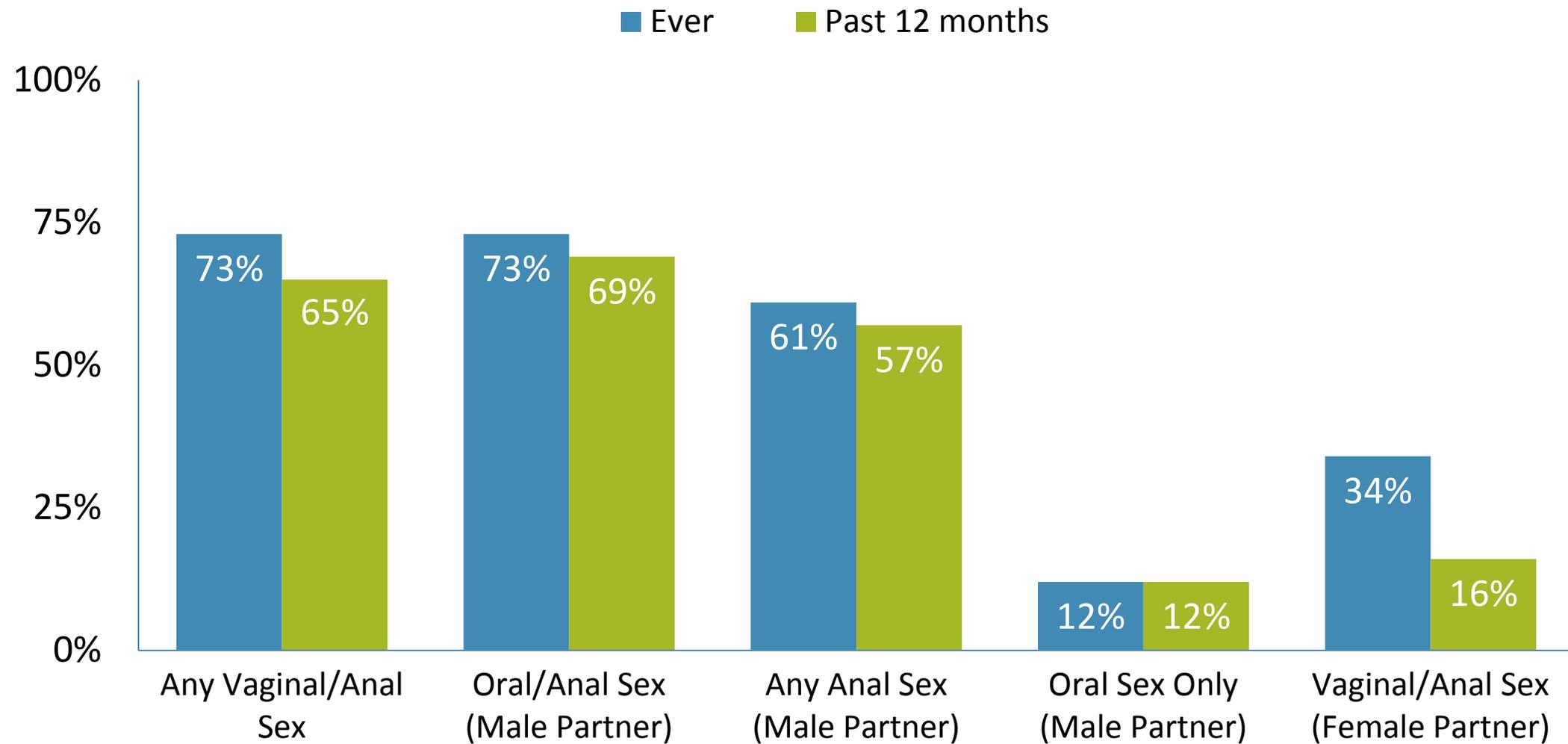
Ever	9%
Past 12 Months	4%

Education

Currently in HS/pursuing GED	86%
Completed HS/GED	12%
Did not complete HS/GED	2%

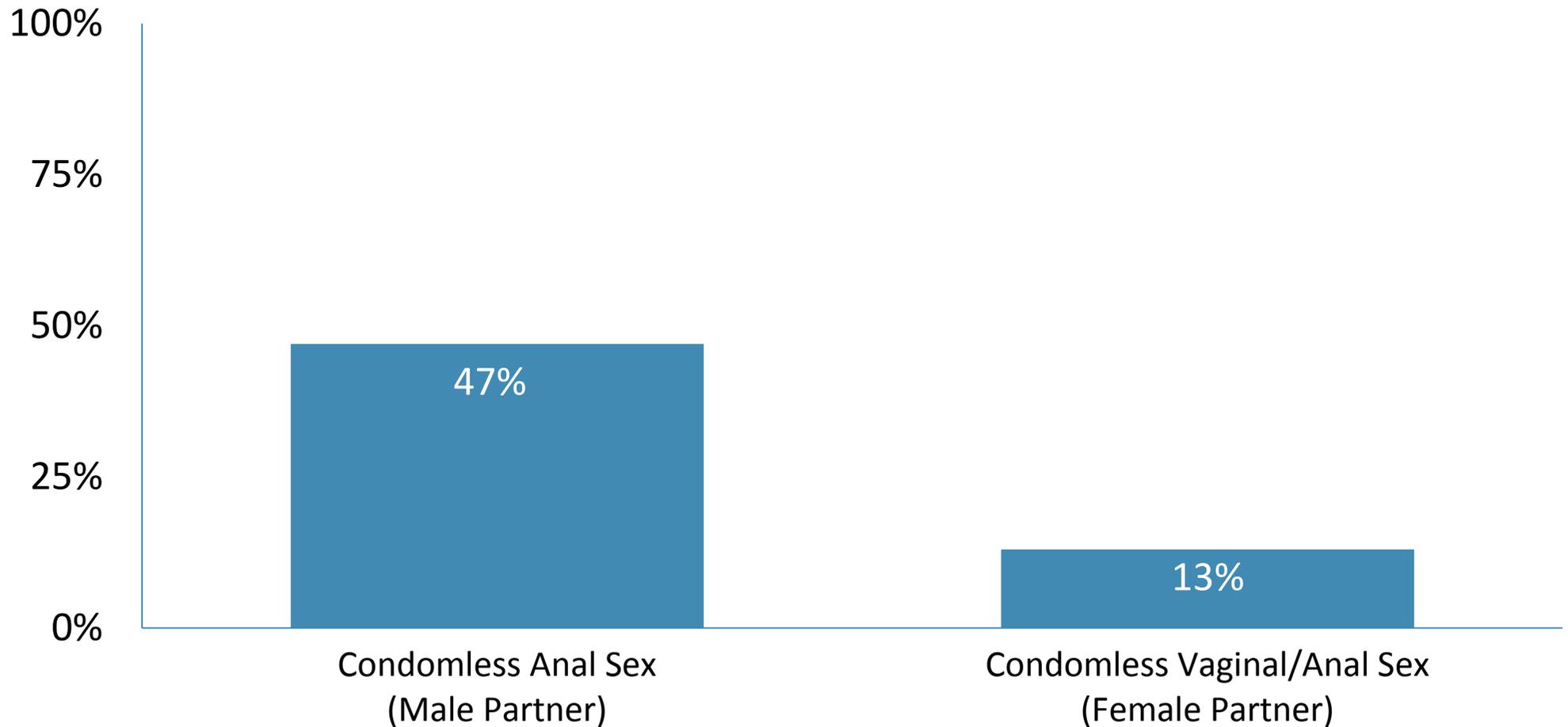
Sexual Behaviors

NYC NHBS-YMSM, n=226 (HIV-/Unk.)



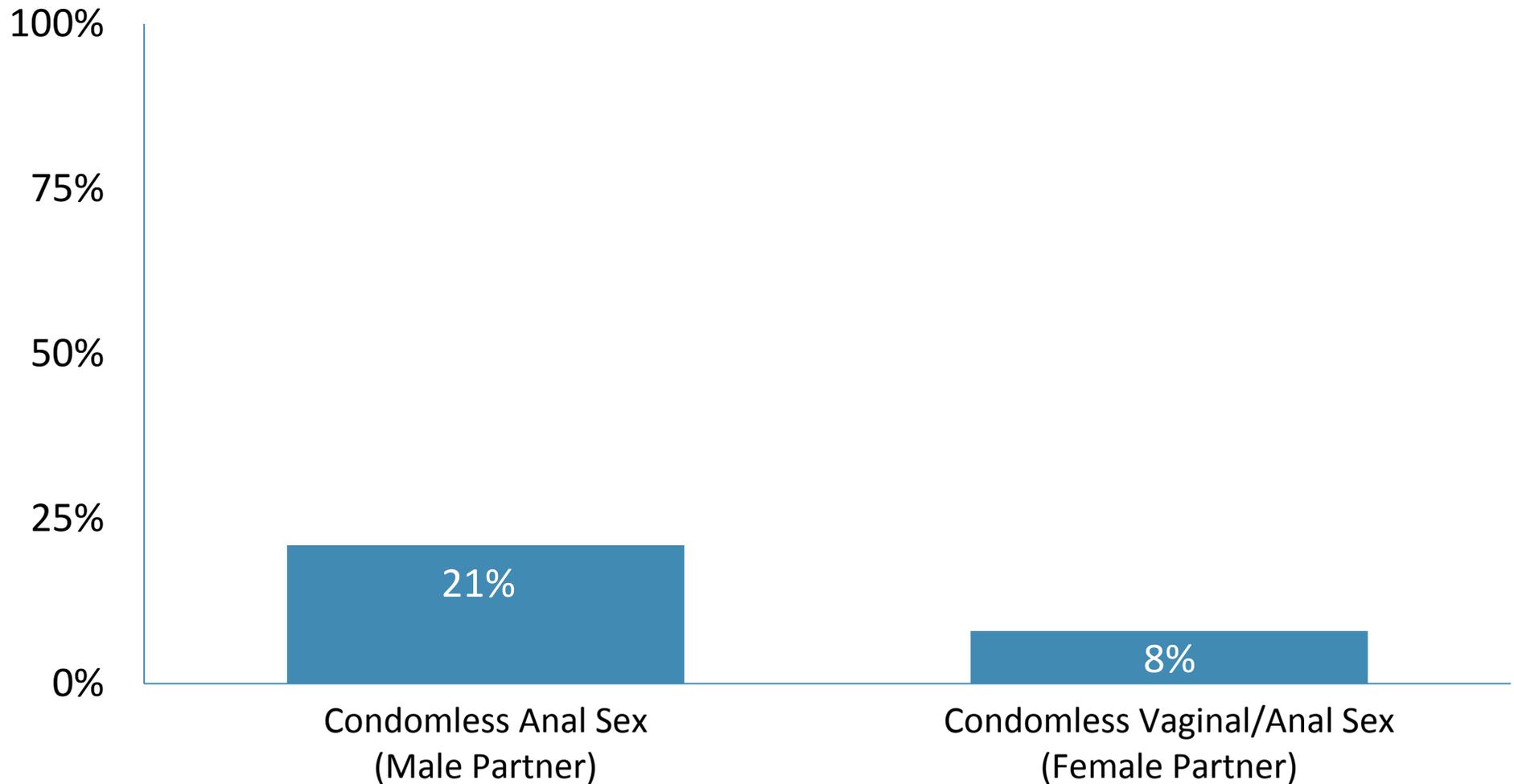
Condomless Sex in Past 12 Months

NYC NHBS-YMSM, n=164 (HIV-/Unk., ever sexually active)



Condomless Sex at Last Sex in Past 12 Months

NYC NHBS-YMSM, n=146 (HIV-/Unk., sexually active 12m)



Number of Male Sex Partners¹ in Past 12 Months

NYC NHBS-YMSM, n=164 (HIV-/Unk., ever sexually active)

	Median	Mean	Minimum	Maximum
Serious²	1.0	1.1	0	20
Casual³	1.0	4.4	0	250
All Types	2.0	5.5	0	250

¹Males with whom participant reports oral or anal sex

²Defined as someone the participant dated for a while and feel very close to

³Defined as someone the participant is casually dating or is sleeping with but not dating

Median Number of Male Sex Partners¹ in Past 12 Months by Participants' Race/Ethnicity

NYC NHBS-YMSM n=156 (HIV-/Unk., male sex partner in past 12 months)

	Black	Hispanic/ Latino	White	Other
Serious²	1.0	1.0	0.5	1.0
Casual³	2.0	1.0	2.0	3.0
All Types	2.0	2.0	2.0	3.5

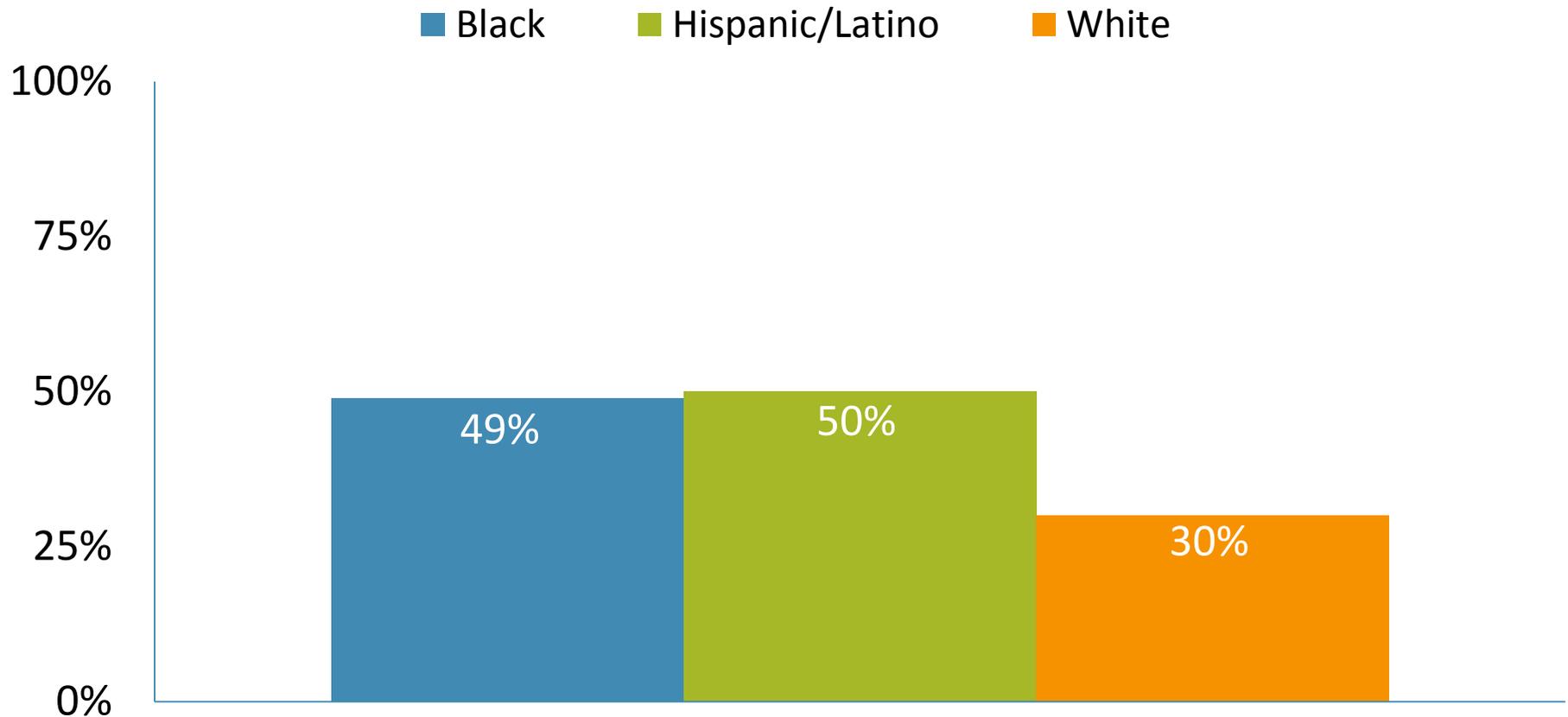
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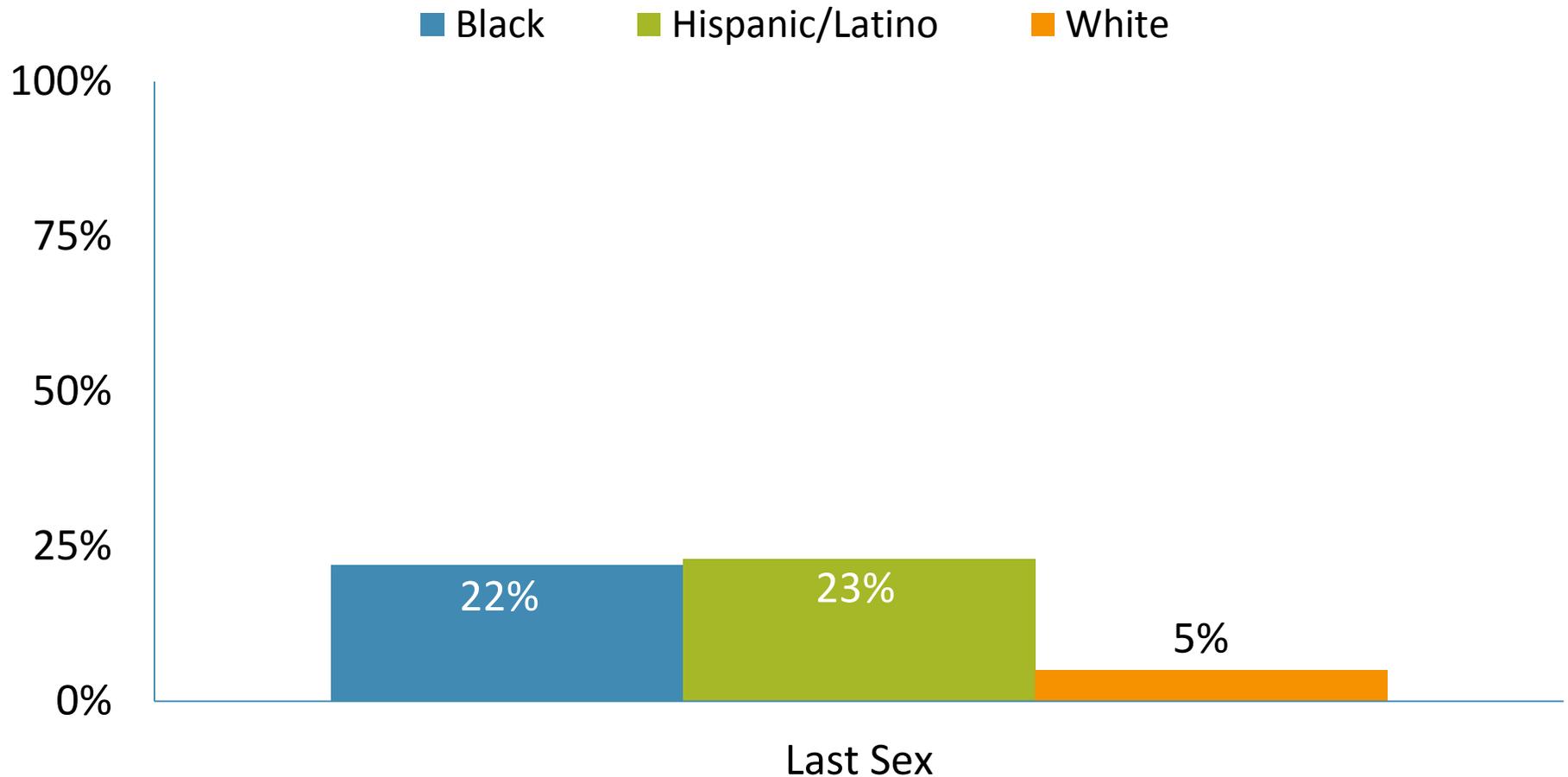
Condomless Anal Sex with a Man in Past 12 Months by Participants' Race/Ethnicity

*NYC NHBS-YMSM, n=159 (HIV-/Unk, ever sexually active)**



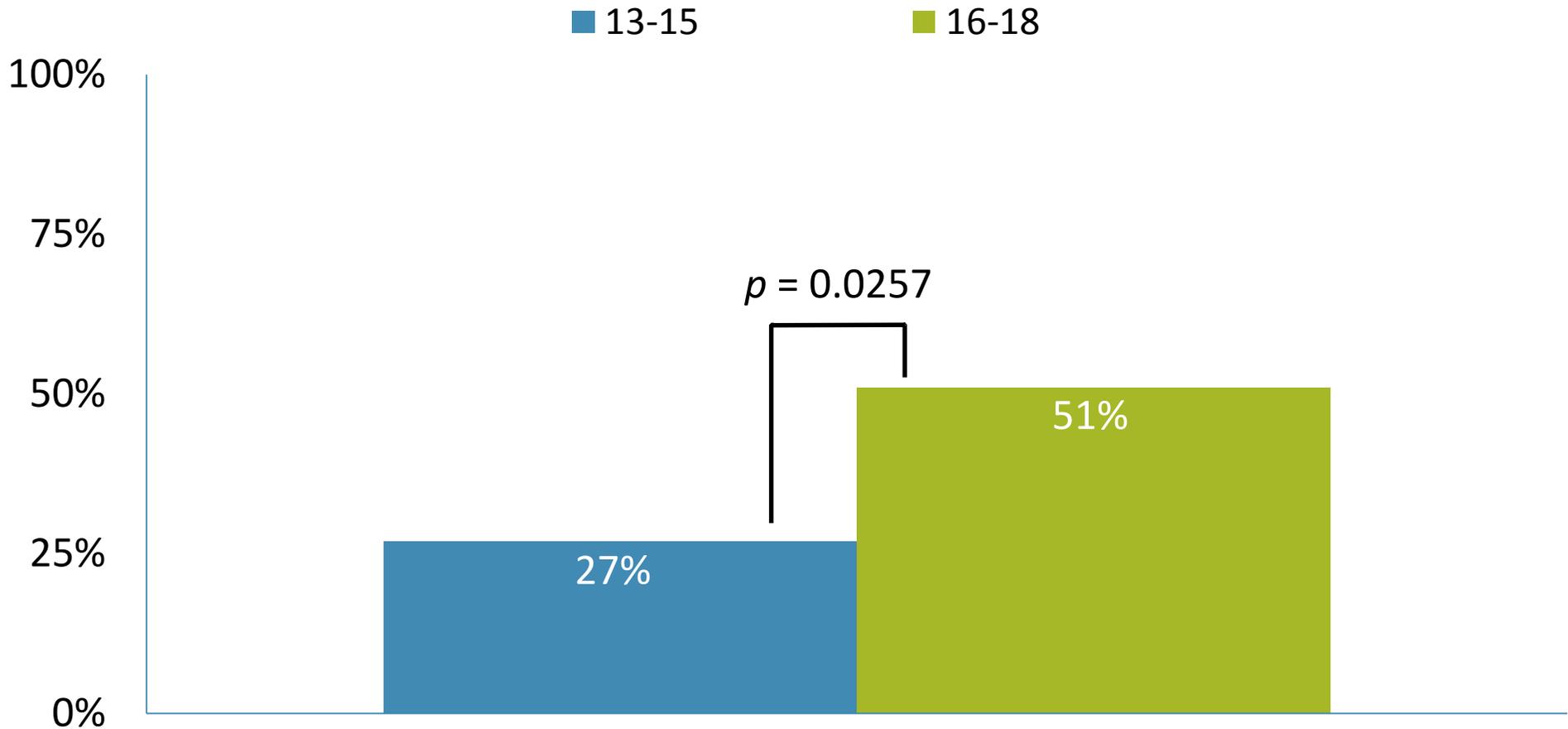
Condomless Anal Sex with a Man at Last Sex in Past 12 Months by Participants' Race/Ethnicity

NYC NHBS-YMSM, n=141 (HIV-/Unk., sexually active 12m)*



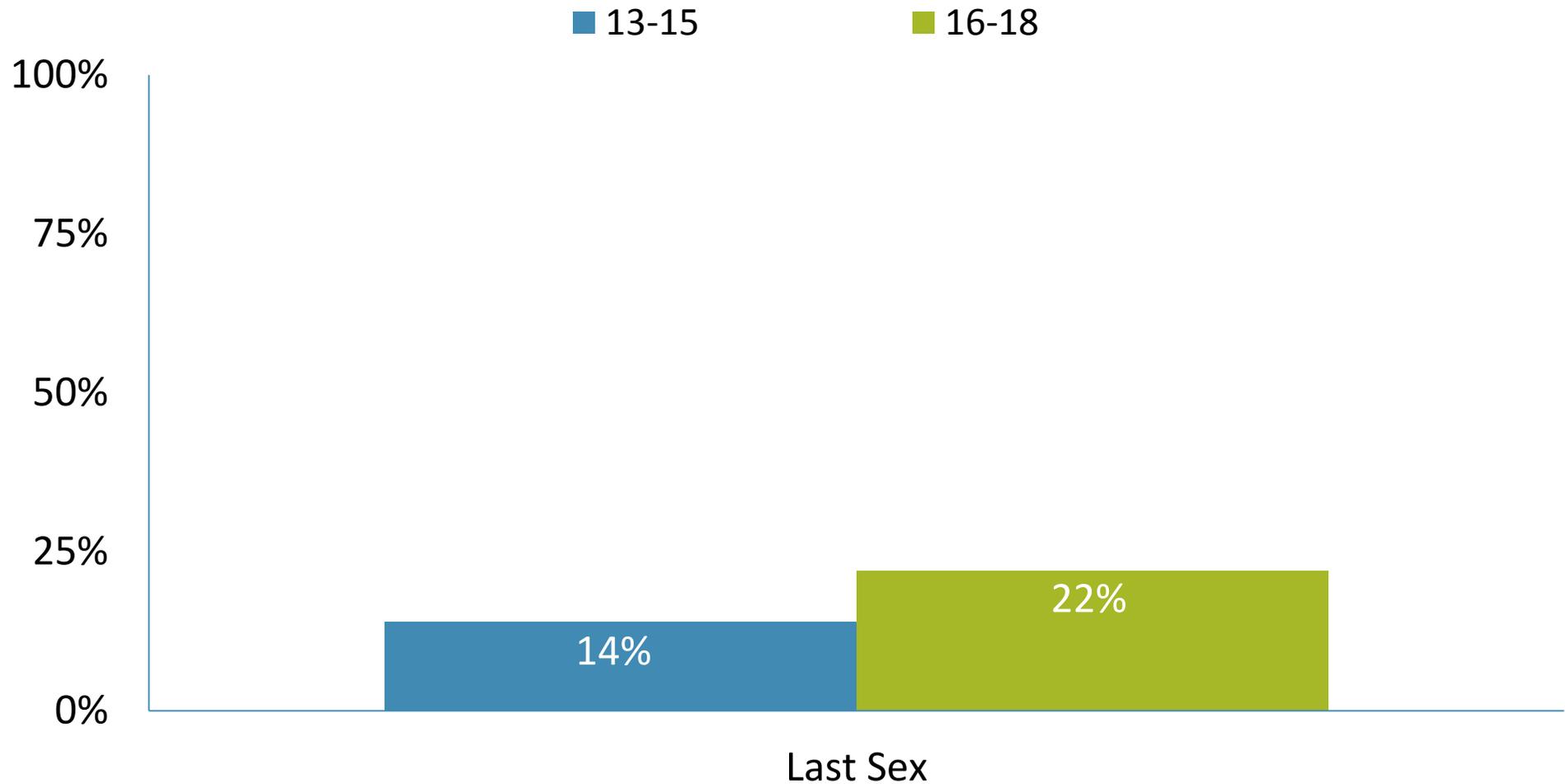
Condomless Anal Sex with a Man in Past 12 Months by Participants' Age

NYC NHBS-YMSM, n=164 (HIV-/Unk., ever sexually active)



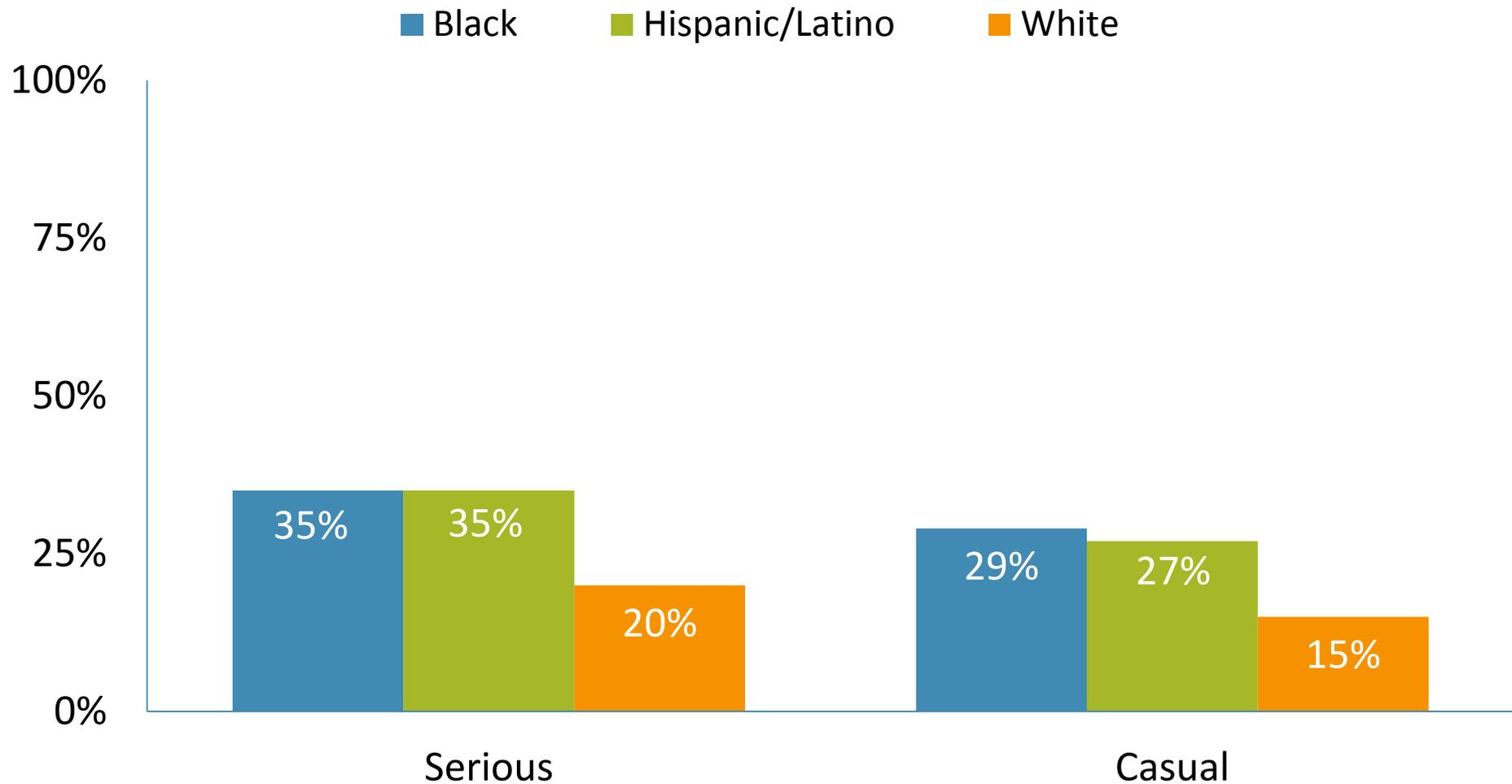
Condomless Anal Sex with a Man at Last Sex in Past 12 Months by Participants' Age

NYC NHBS-YMSM, n=146 (HIV-/Unk., sexually active 12m)



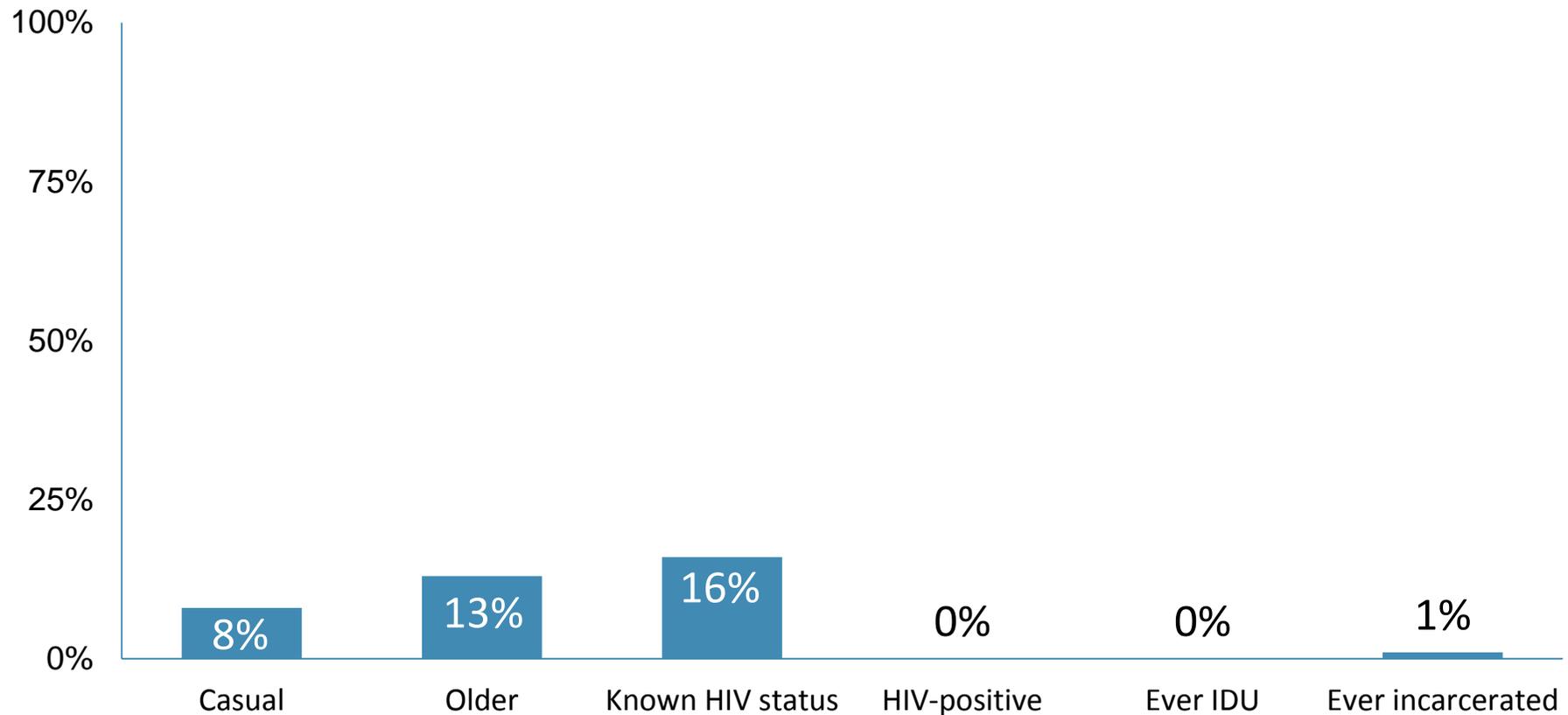
Condomless Anal Sex in Past 12 Months by Male Partner Type and Participant's Race/Ethnicity

NYC NHBS-YMSM, n=159 (HIV-/Unk., ever sexually active)*



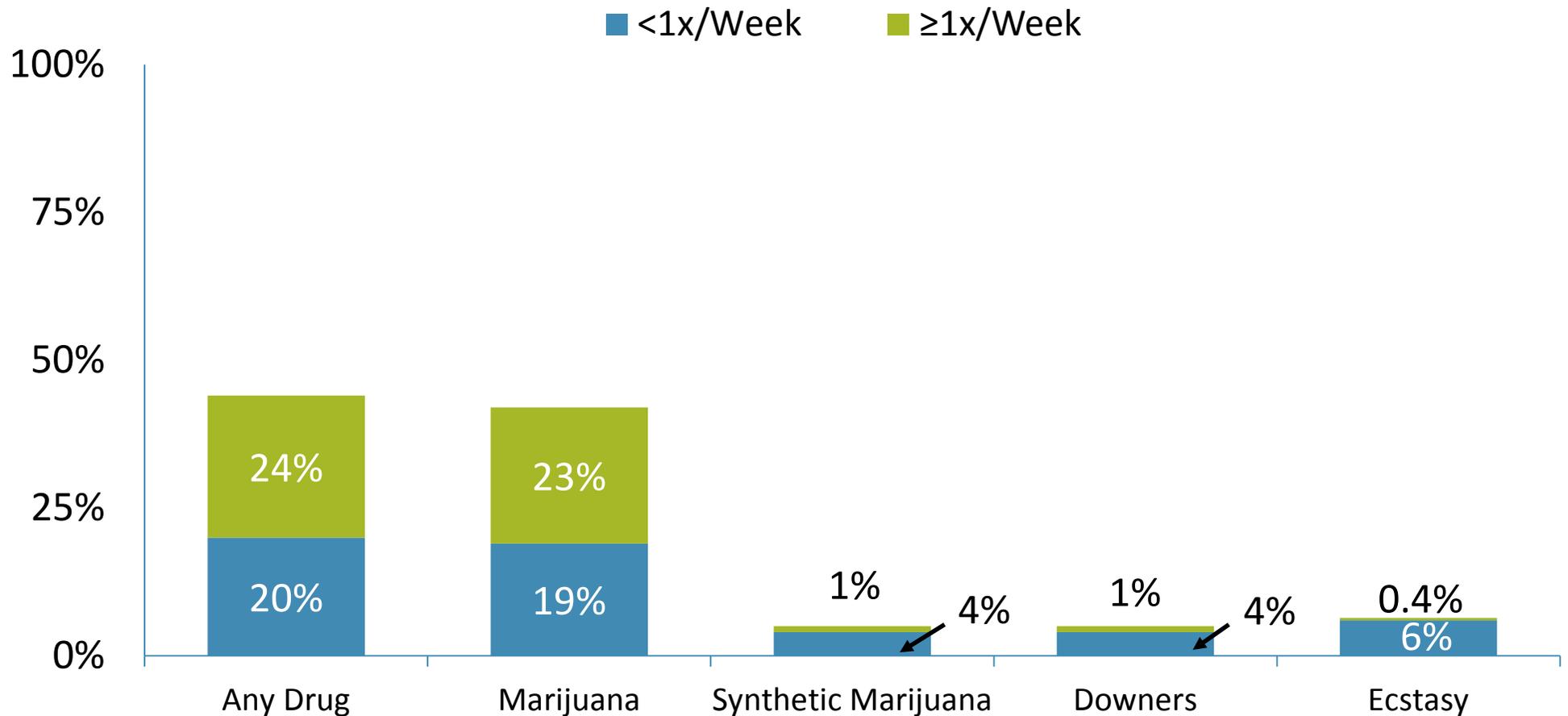
Condomless Anal Sex at Last Sex in Past 12 Months by Partner Characteristics

NYC NHBS-YMSM, n=146 (HIV-/Unk., sexually active 12m)



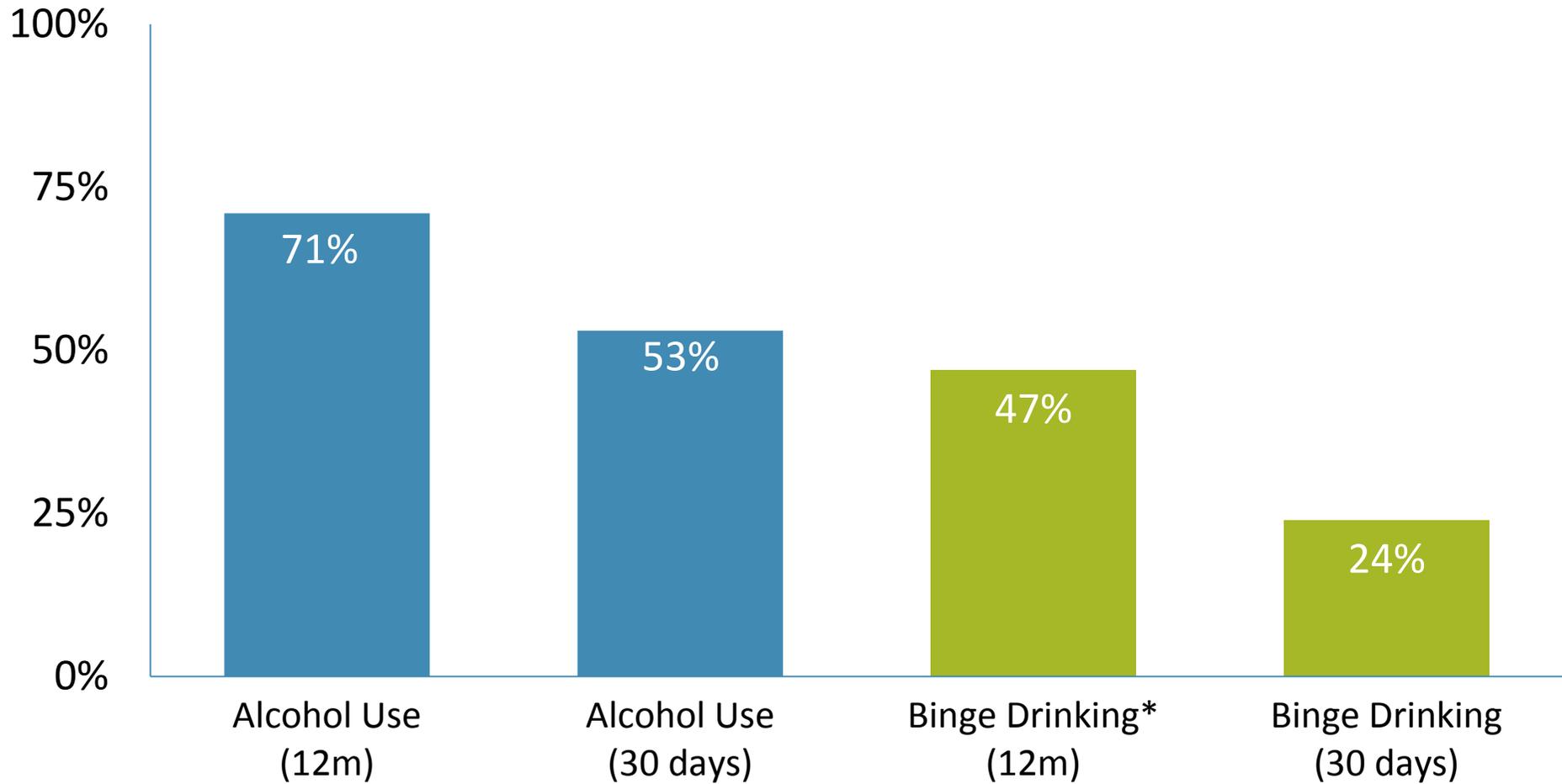
Non-Injection Drug Use* in Past 12 Months

NYC NHBS-YMSM, n=226 (HIV-/Unk.)



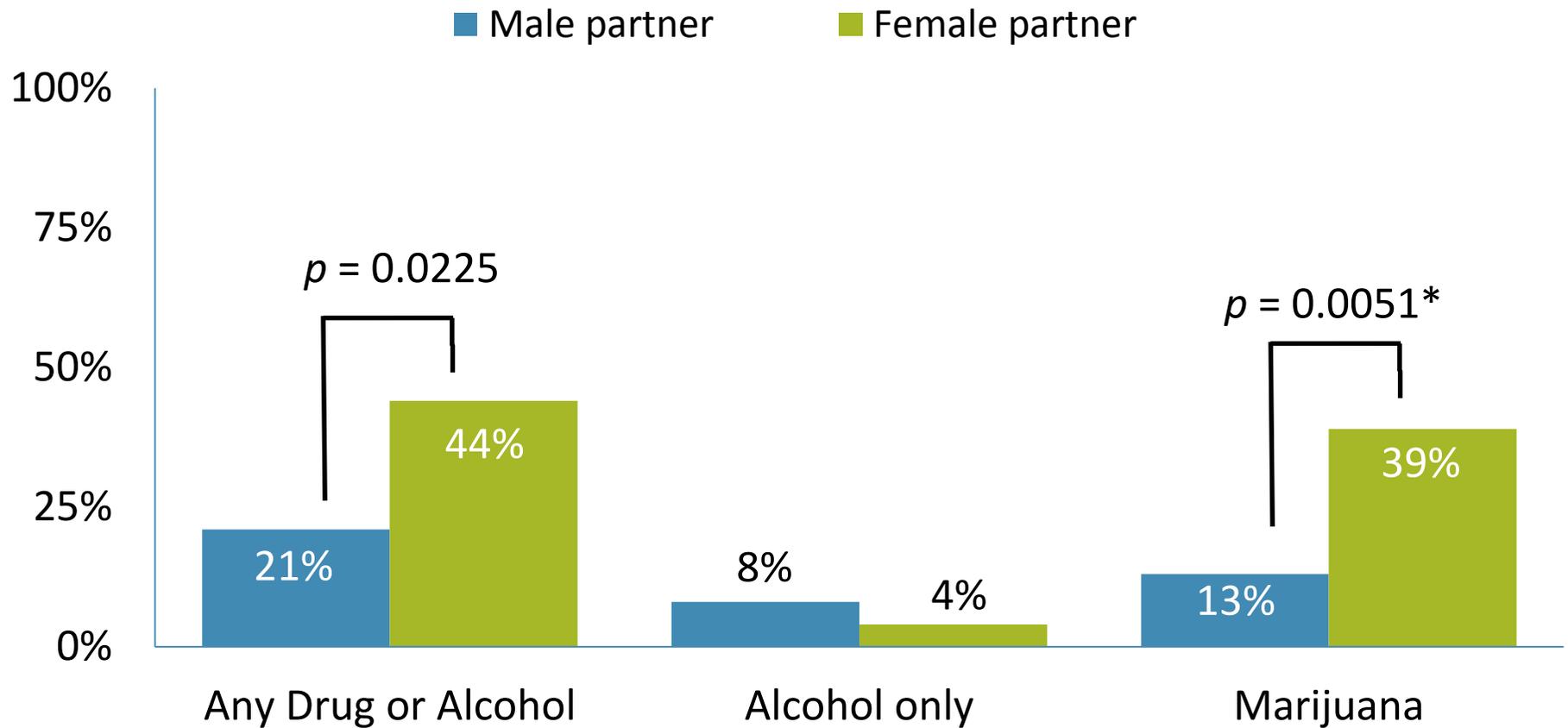
Alcohol Use

NYC NHBS-YMSM, n=226 (HIV-/Unk.)



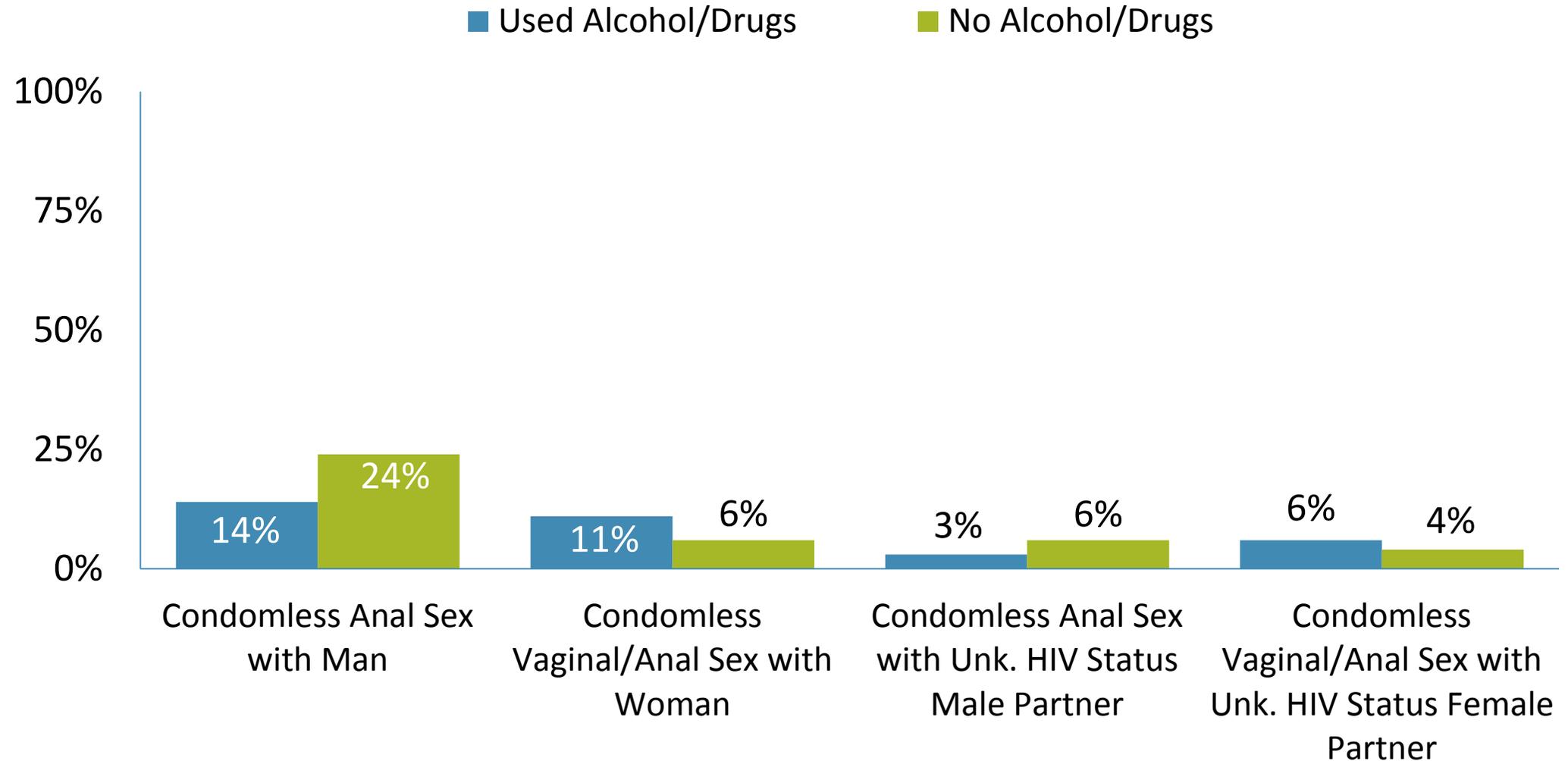
Drug and Alcohol Use at Last Sex

NYC NHBS-YMSM, n=146 (HIV-/Unk., sexually active 12m)



Drug/Alcohol Use and Condomless Sex at Last Sex in Past 12 Months

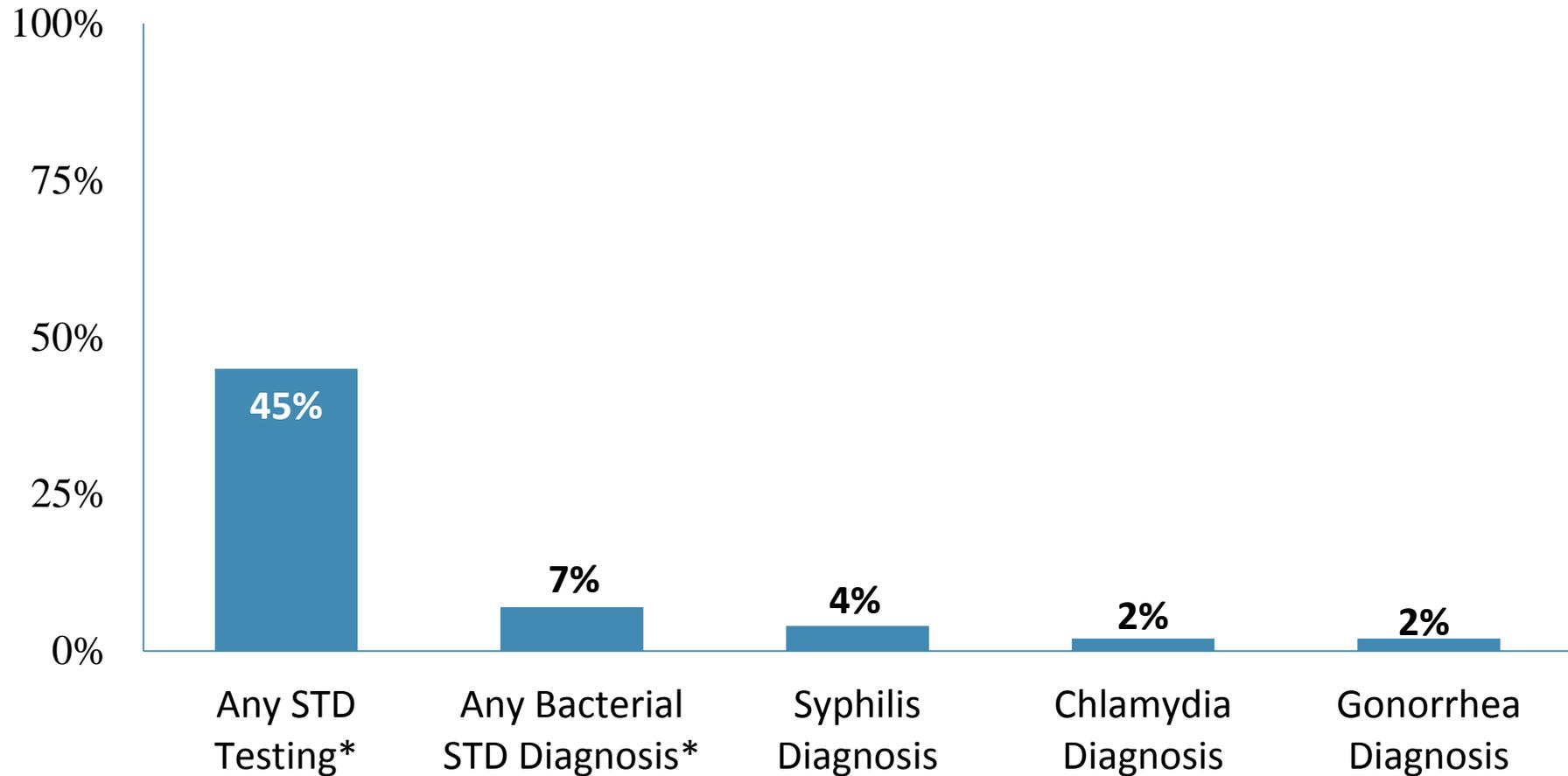
NYC NHBS-YMSM, n=146 (HIV-/Unk., sexually active 12m)



Self-Reported Sexually Transmitted Disease (STD)

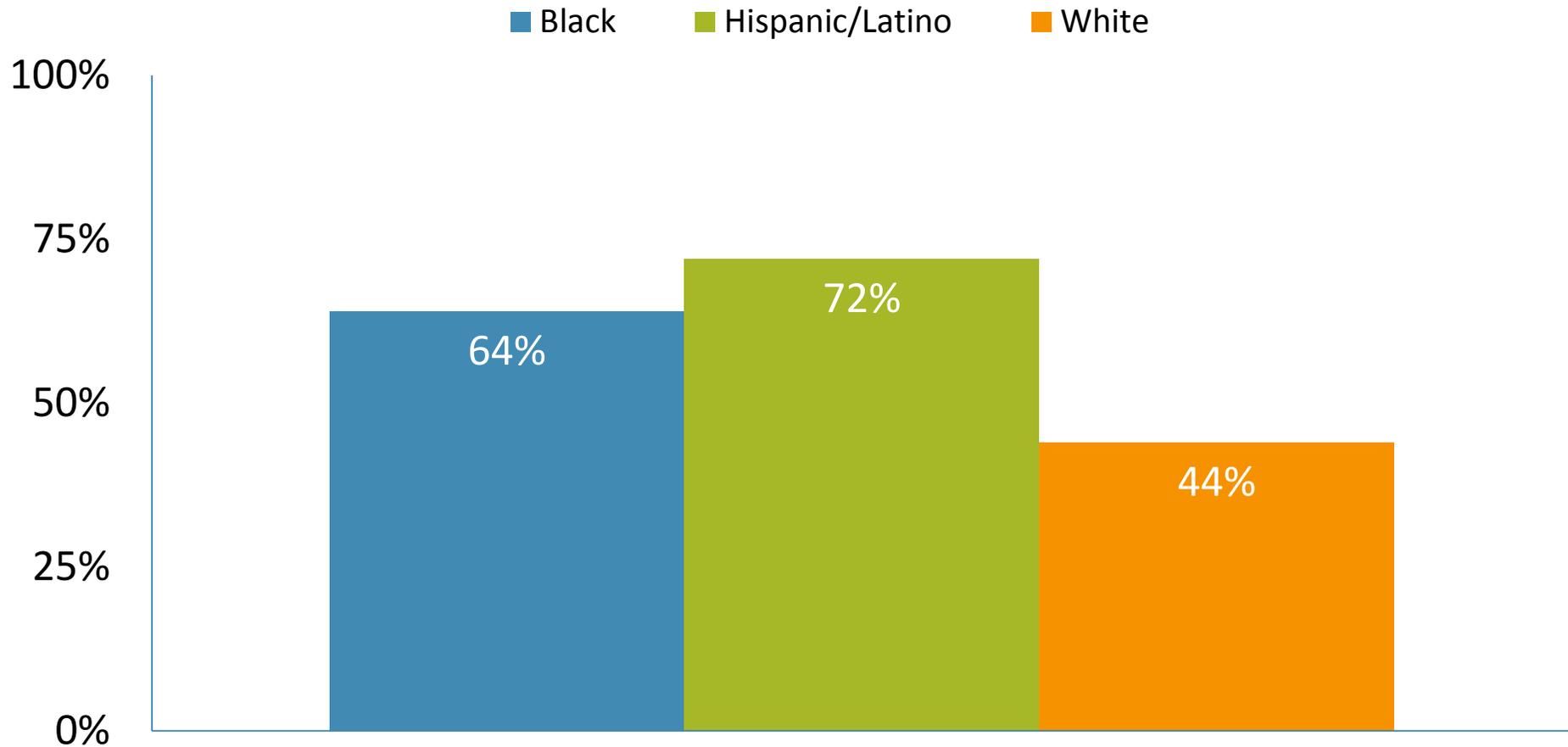
Testing and Diagnoses in Past 12 Months

NYC NHBS-YMSM, n=164 (HIV-/Unk., ever sexually active)



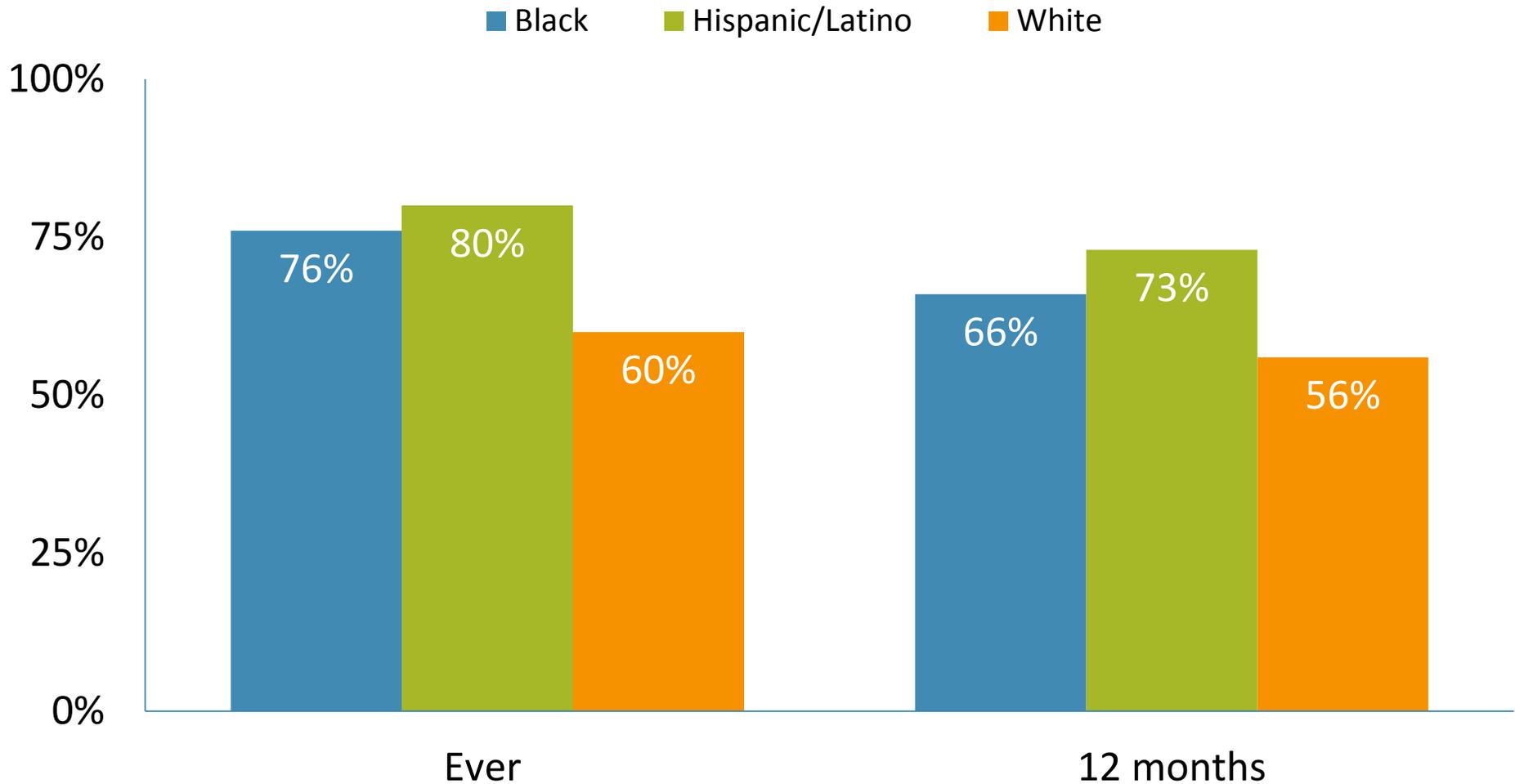
Offered HIV Test by Health Provider in Past 12 Months by Race/Ethnicity

*NYC NHBS-YMSM, n=144 (HIV-/Unk., sexually active, saw health provider)**



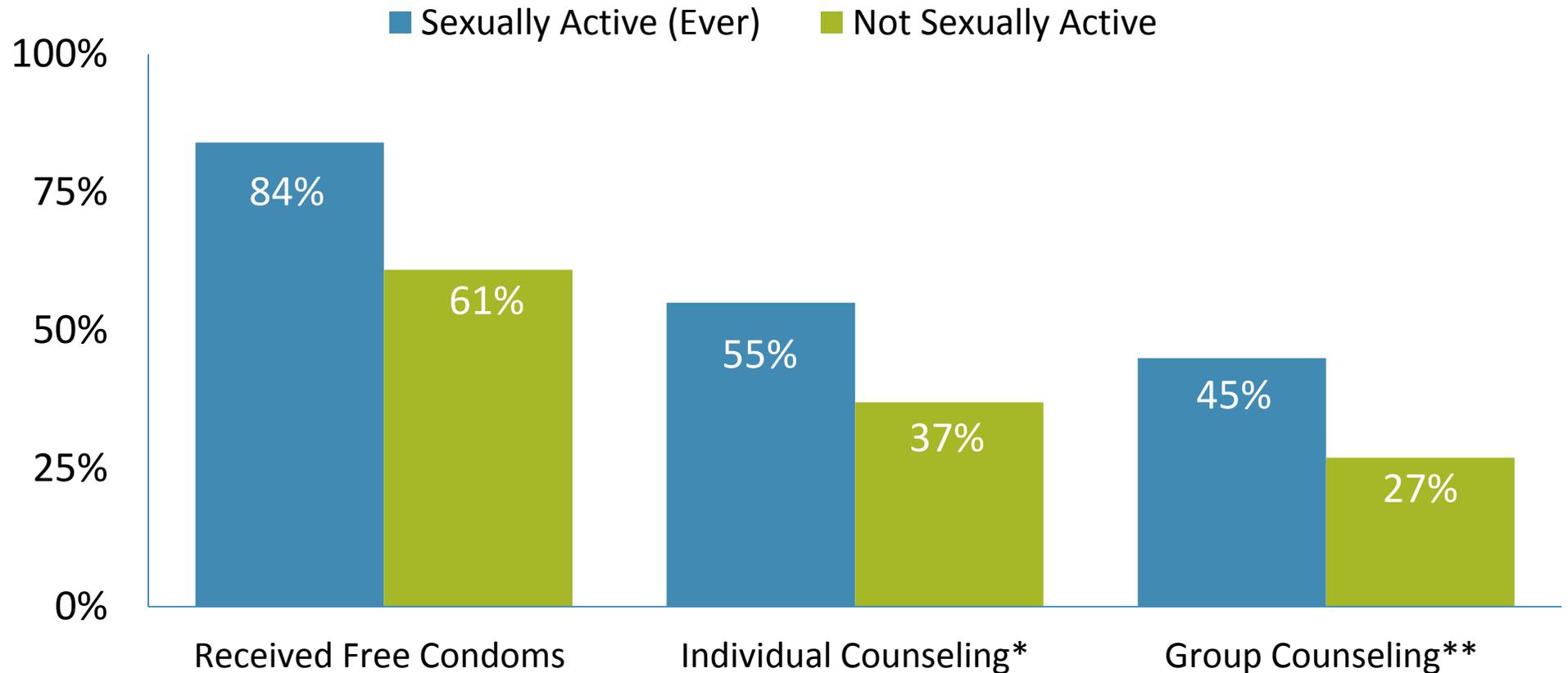
HIV Testing History by Race/Ethnicity

NYC NHBS-YMSM, n=159 (HIV-/Unk., sexually active)*



HIV Prevention Services in the Past 12 Months

NYC NHBS-YMSM, n=226 (HIV-/Unk.)

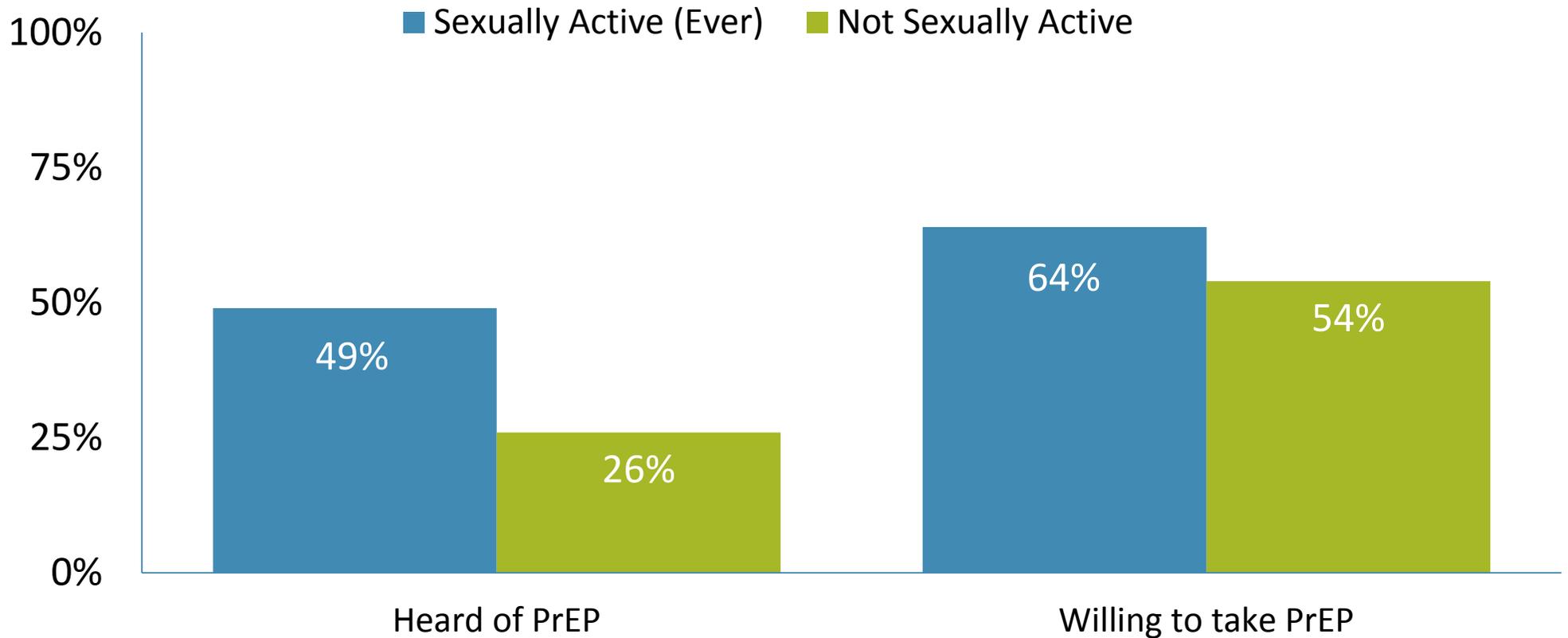


*Defined as a one-on-one conversation with outreach worker, counselor, or prevention program worker about ways to prevent HIV. Does not include counseling as part of an HIV test

**Defined as any organized session with a group of small people to discuss ways to prevent HIV. Does not include discussions with a group of friends

Pre-Exposure Prophylaxis (PrEP)

NYC NHBS-YMSM, n=226 (HIV-/Unk.)



HIV Prevalence and Awareness by Age

NYC NHBS-YMSM, n=177 (tested in study with valid result)

	Tested*	HIV-Positive	% Unaware ¹
Overall	76.3%	4.0%	28.6%
By Age			
13-16	65.4%	0%	0%
17-18	79.4%	4.9%	28.6%

* $p=0.0357$ for difference in proportion tested by age

HIV Prevalence and Awareness by Race/Ethnicity¹

NYC NHBS-YMSM, n=169 (tested in study with valid result)

	Tested	HIV-Positive	% Unaware ²
By Race/Ethnicity			
Black	75.0%	3.5%	50.0%
Hispanic/Latino	79.5%	5.4%	20.0%
White	63.3%	0%	0%

¹Other race category not shown due to small sample size

²Among MSM who tested HIV positive (n=7)

Conclusions

- Venue-based sampling (VBS) was a more effective sampling method to recruit YMSM in NYC, compared to respondent-driven sampling.
- Most YMSM were sexually active and a high proportion reported engaging in unprotected anal sex.
- Despite a small number of HIV-positive participants, HIV prevalence was higher than in the general NYC population.
- YMSM of color may be at higher risk for HIV infection. Risk behaviors were more prevalent among YMSMOC in this sample.

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