

# **HIV Risk and Prevalence among NYC Men who Have Sex with Men**

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Results from the  
2014 National HIV Behavioral Surveillance Study

# Background

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- 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 new infections
- Nationally, HIV incidence has increased among young, black MSM (Prejean, 2011)
- HIV risk factors vary in different MSM communities

# National HIV Behavioral Surveillance (NHBS)

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- 20 metropolitan statistical areas throughout the United States
- Funded by CDC, designed collaboratively
- Ongoing, cyclical study of three risk groups: *MSM, IDU, and high-risk heterosexuals*
- Fourth round of NHBS-MSM data collection in 2014
- Cross-sectional study design

# NHBS Objectives

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- Determine frequency and correlates of HIV risk behaviors
- Assess HIV testing history and patterns
- Assess exposure to and use of HIV prevention services
- Estimate the prevalence of HIV infection
- Understand trends in risk and prevalence

# Eligibility Criteria

*NYC NHBS-MSM, 2014*

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- Born male, currently identifies as male
- At least 18 years old
- NYC resident
- Ever had oral or anal sex with another man
- Speaks English or Spanish

# Venue-Based Sampling

*NYC NHBS-MSM, 2014*

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- Universe of MSM-oriented venues constructed
  - *Bars, clubs, parks, restaurants, gyms, cruising areas*
- Venues randomly selected, placed on monthly calendar
  - *Special events or venues also added non-randomly*
- Field team sequentially samples men at venue
  - *Men must cross an imaginary line; venue volume measured*
- Approached men are screened, and, if eligible, provide informed consent, interviewed, and HIV tested
- Data was collected August – November 2014

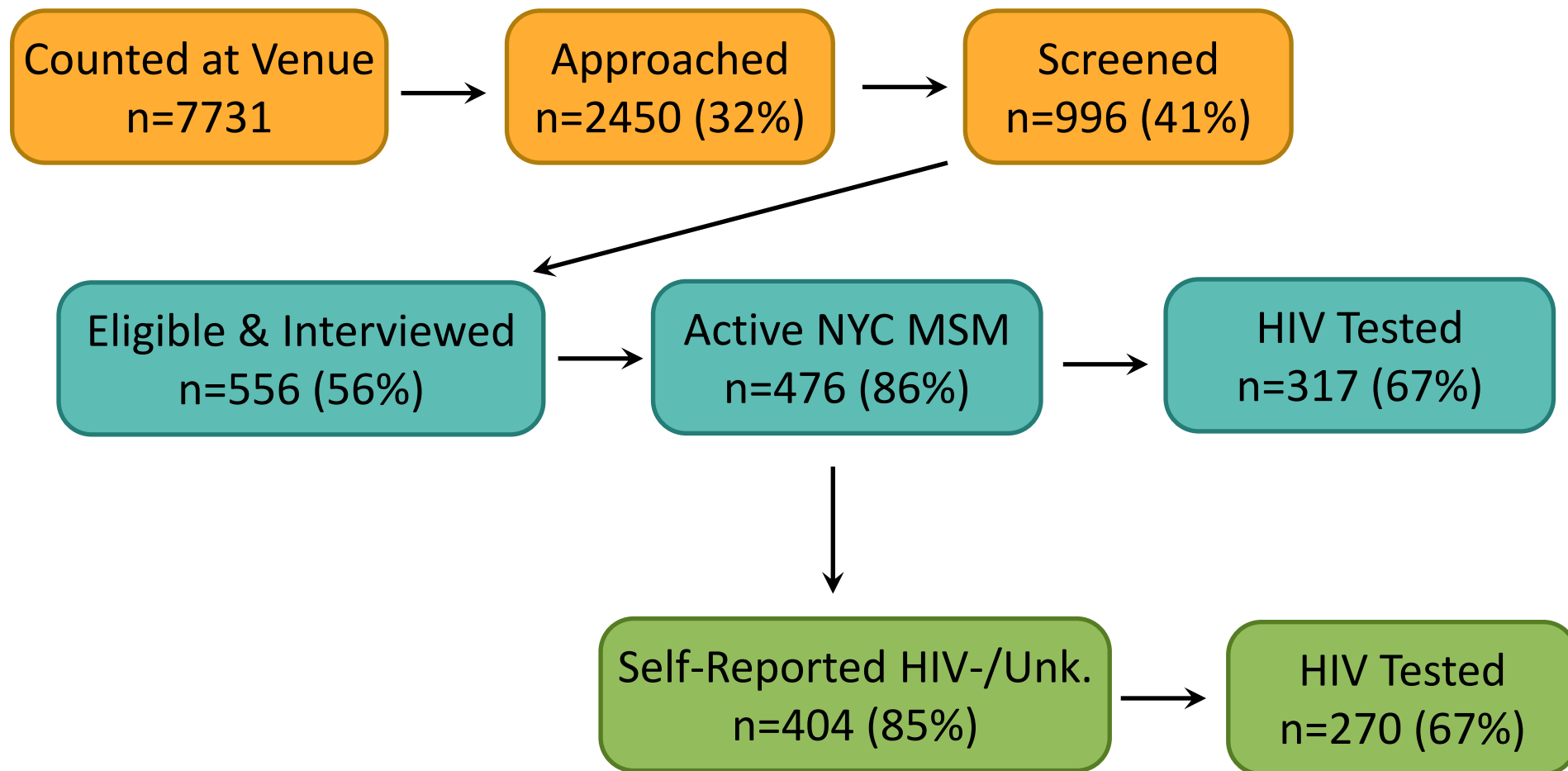
# Statistical Analysis *NYC NHBS-MSM, 2014*

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- Analyses restricted to those who reported oral or anal sex with another man in the past 12 months (n=476)
- 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 MSM who did not self-report as HIV+ (n=404), since awareness of HIV infection influences risk
- Overall prevalence of HIV infection determined by confirmed Western blot test among those who tested (n=317)
  - Awareness of HIV status, among those who tested HIV positive (n=47)

# Study Sample

*NYC NHBS-MSM, 2014*





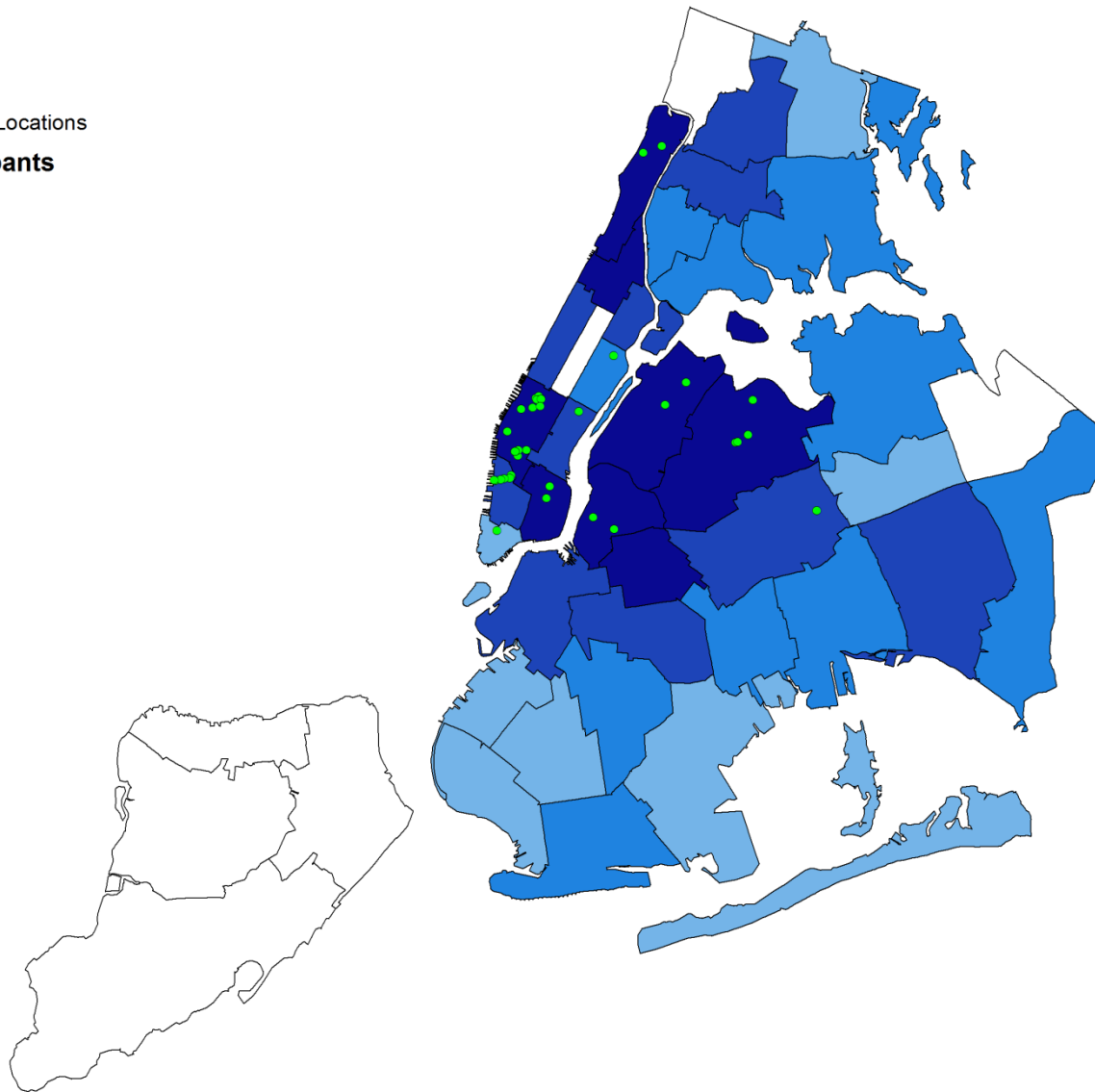
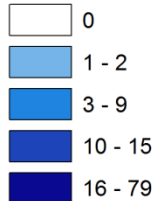
# Participant United Hospital Fund (UHF) Neighborhood of Residence and Recruitment Venues

NYC NHBS-MSM, 2014, n=459 with valid ZIP codes

## Legend

• Venue Locations

## # of participants



Manhattan: 48%

Brooklyn: 24%

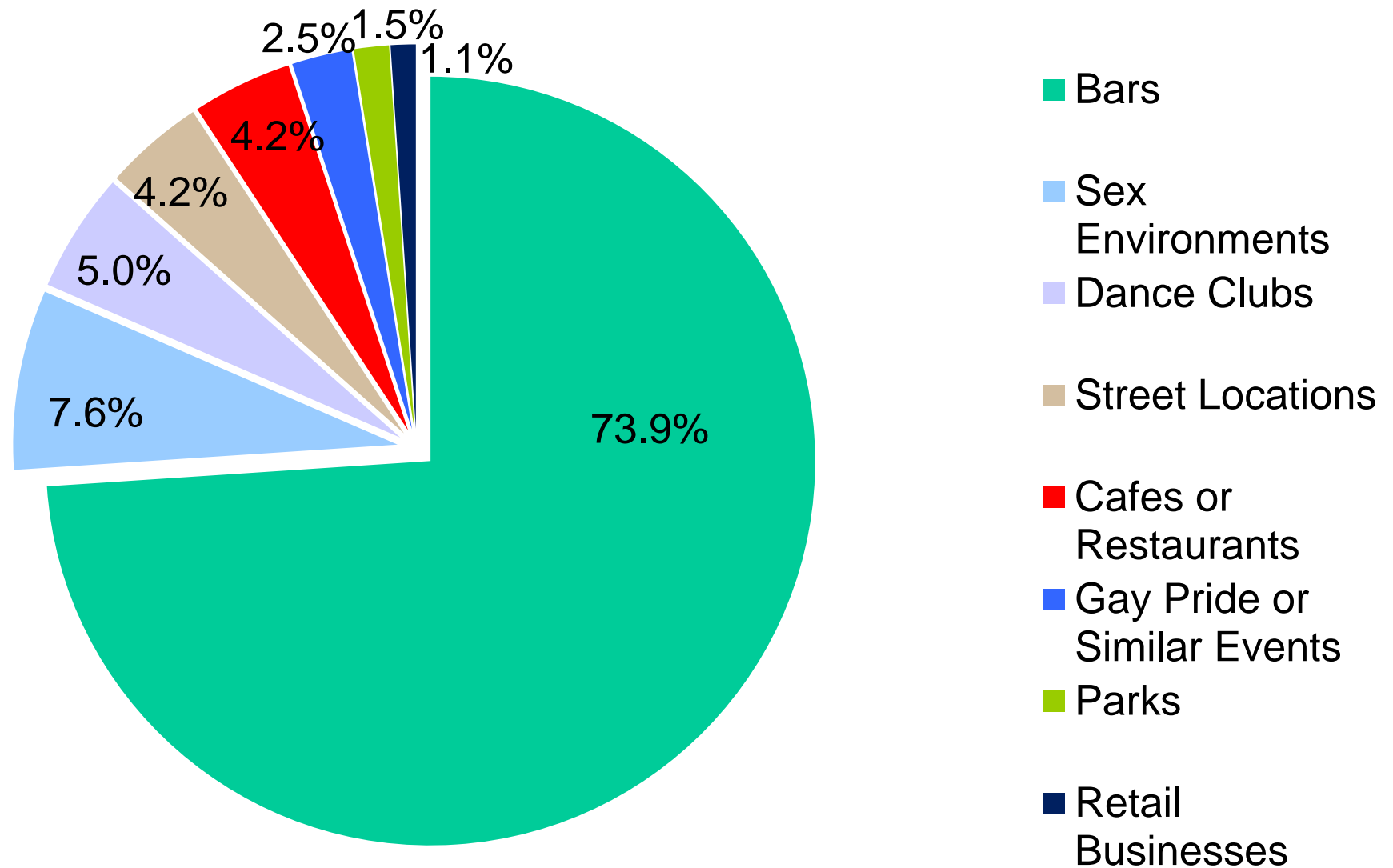
Queens: 19%

Bronx: 8%

Staten Island: 0%

# Recruitment Venues

NYC NHBS-MSM, 2014, n=476



# Demographics

*NYC NHBS-MSM, 2014, n=476*

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## Race/Ethnicity

Black	16%
Hispanic	30%
White	45%
Other	5%
Not Reported	3%

## Age

18-29	44%
30-39	30%
40-49	16%
50+	10%

## Sexual orientation

Gay	87%
Bisexual	12%
Heterosexual	<1%
Unknown	<1%

## Birthplace

United States	74%
Puerto Rico	3%
Foreign	24%

# Demographics

*NYC NHBS-MSM, 2014, n=476*

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## Annual Income

<10k	7%
10k-30k	24%
30k-50k	21%
>50k	48%

## Jailed >24 hours

Past 12 Months	3%
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## Education

<High School	1%
High School Graduate or Some College	35%
≥College Graduate	64%

## Homeless

Past 12 Months	5%
Currently	1%

# Number of Male Sex\* Partners in Past 12 Months

*NYC NHBS-MSM, 2014, n=404 (HIV-/Unk.)*

	Median	Mean	Minimum	Maximum
<b>Main</b>	1	1.1	0	60
<b>Casual</b>	4	8.7	0	200
<b>All Types</b>	4	9.8	1	200

\* Oral or anal sex

# Median Number of Male Sex\* Partners in Past 12 Months by Participants' Race/Ethnicity

*NYC NHBS-MSM, 2014, n=394 (reported race, HIV-/Unk.)*

	Black	Hispanic	White	Other
<b>Main</b>	0.5	1	1	1
<b>Casual</b>	3	3	4	4
<b>All Types</b>	4	4	5	4.5

\* Oral or anal sex

# Sexual Behavior

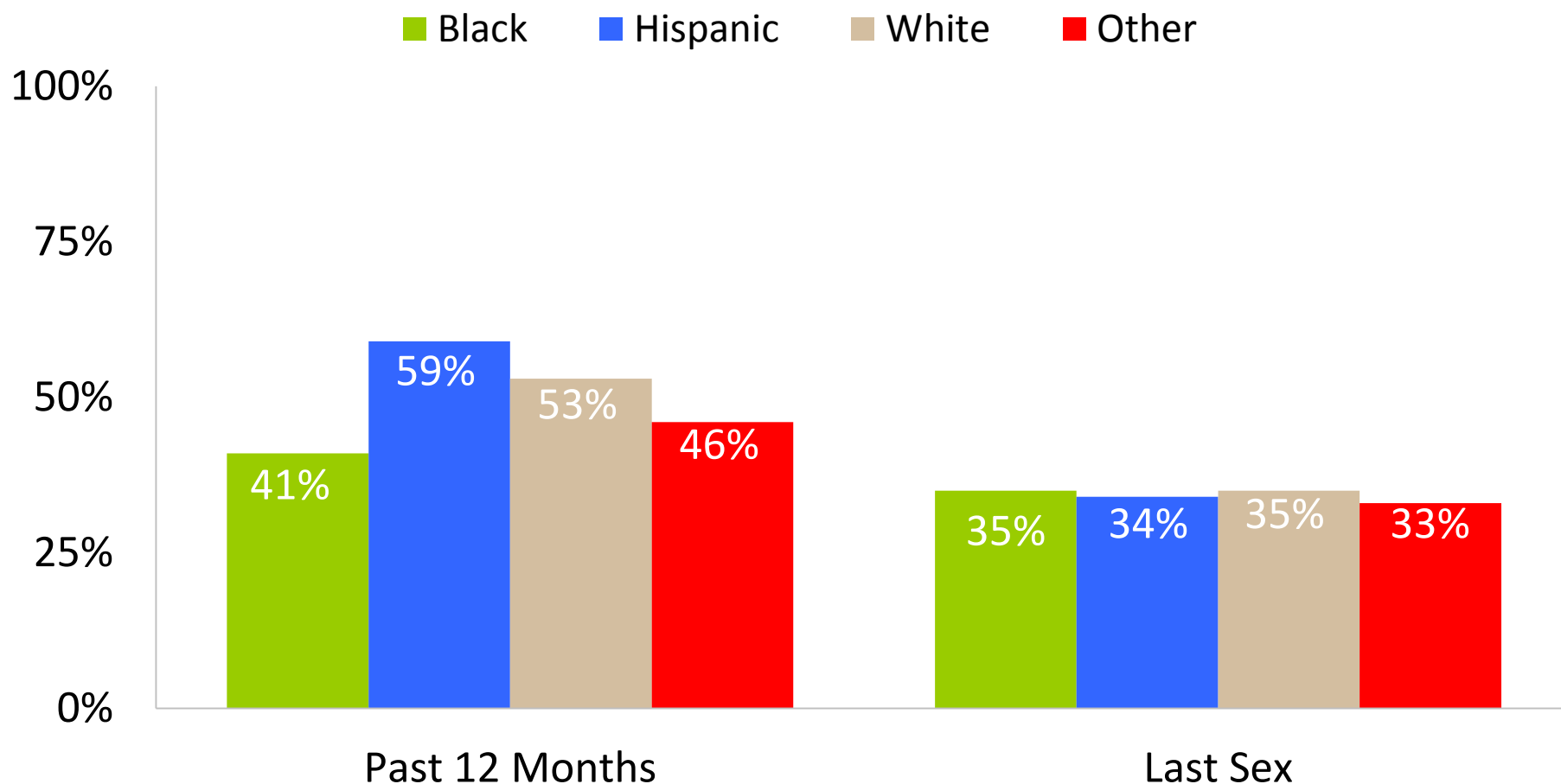
*NYC NHBS-MSM, 2014, n=404 (HIV-/Unk.)*

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Condomless Anal Intercourse (12m)	52%
Condomless Anal Intercourse (Last Sex)	33%
Vaginal or Anal Sex with a Woman (12m)	9%
Condomless Vaginal or Anal Sex with a Woman (12m)	4%

# Condomless Anal Intercourse in Past 12 Months and at Last Sex by Race/Ethnicity

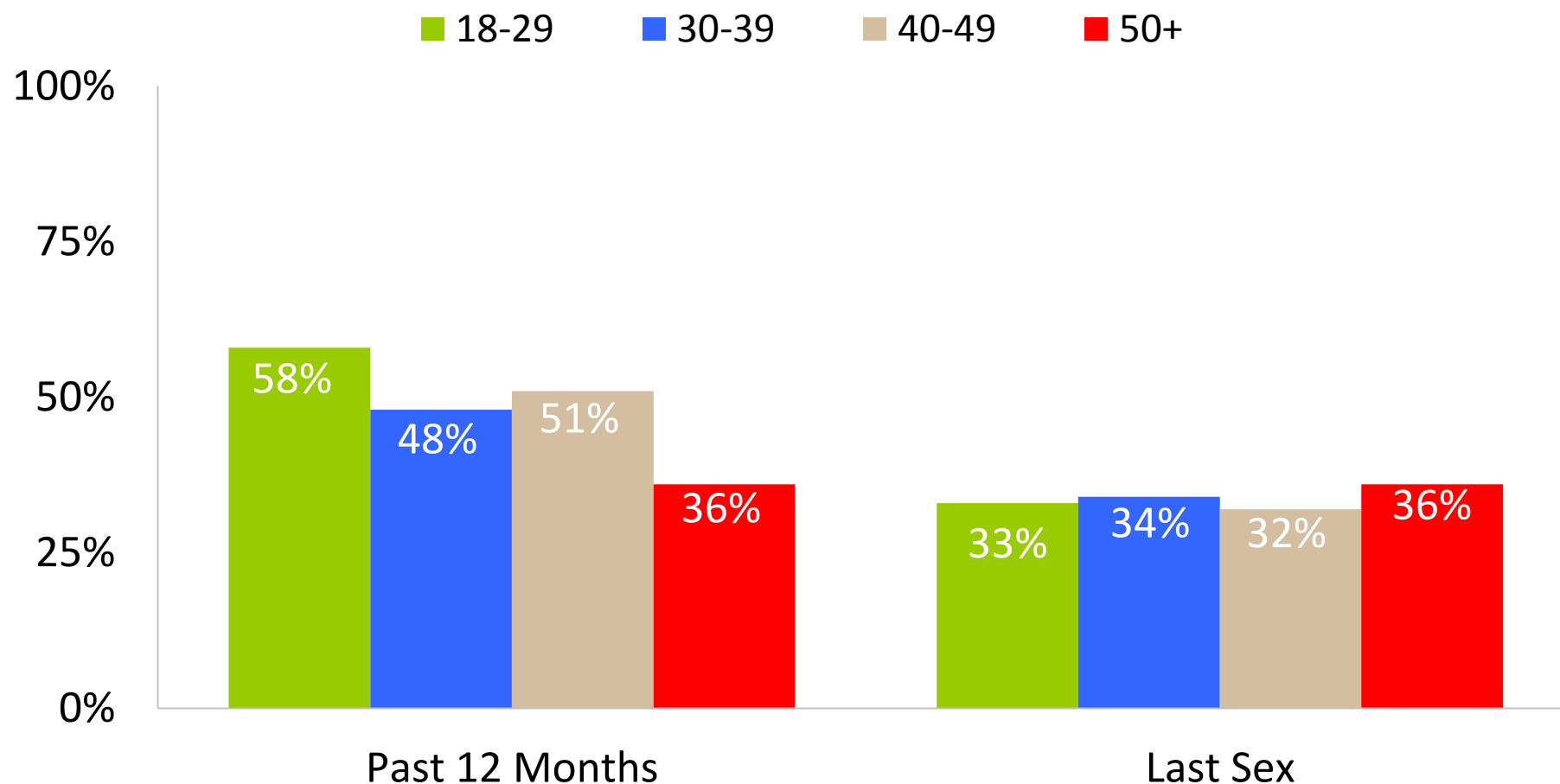
*NYC NHBS-MSM, 2014, n=394 (reported race, HIV-/Unk.)*





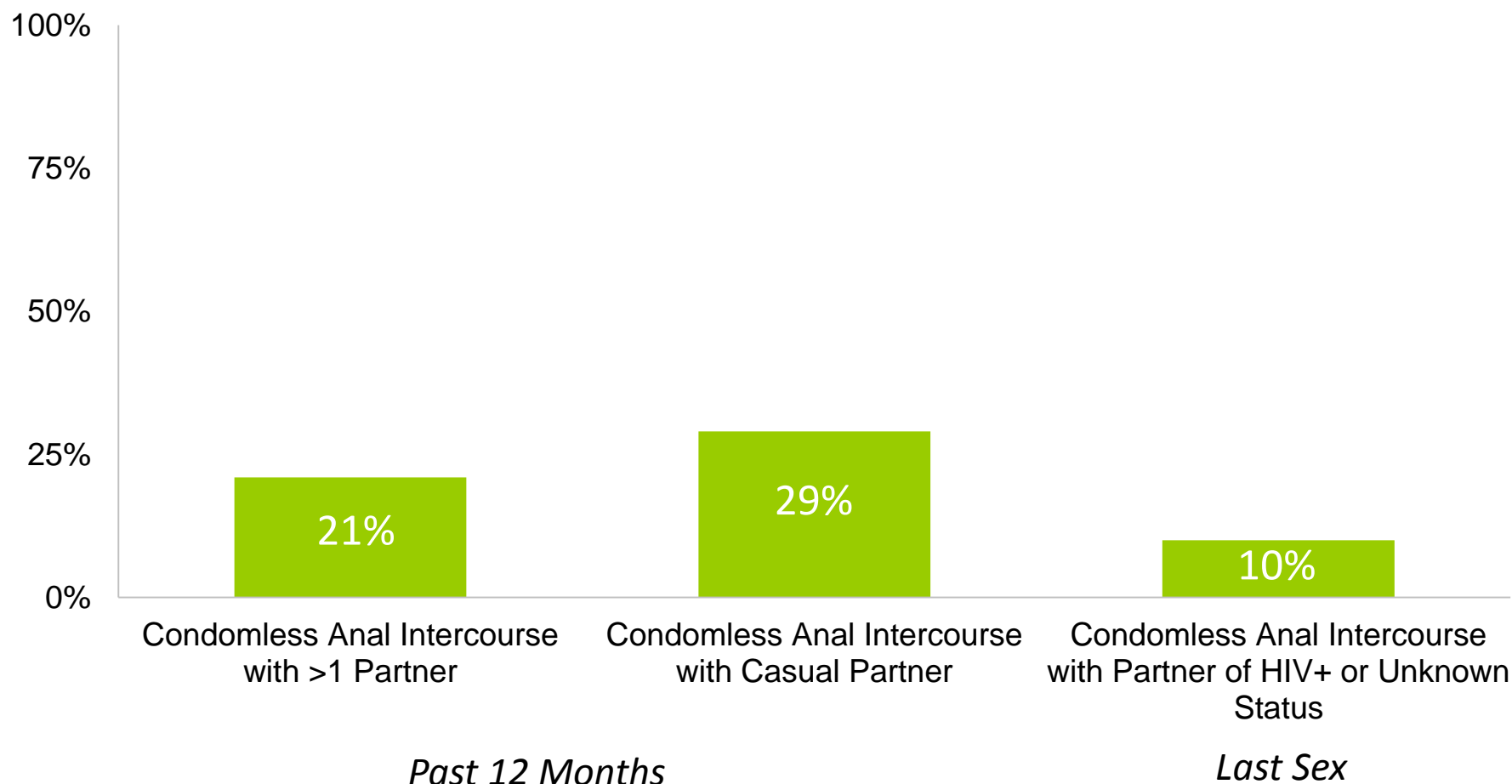
# Condomless Anal Intercourse in Past 12 Months and at Last Sex by Age

NYC NHBS-MSM, 2014, n=404 (HIV-/Unk.)



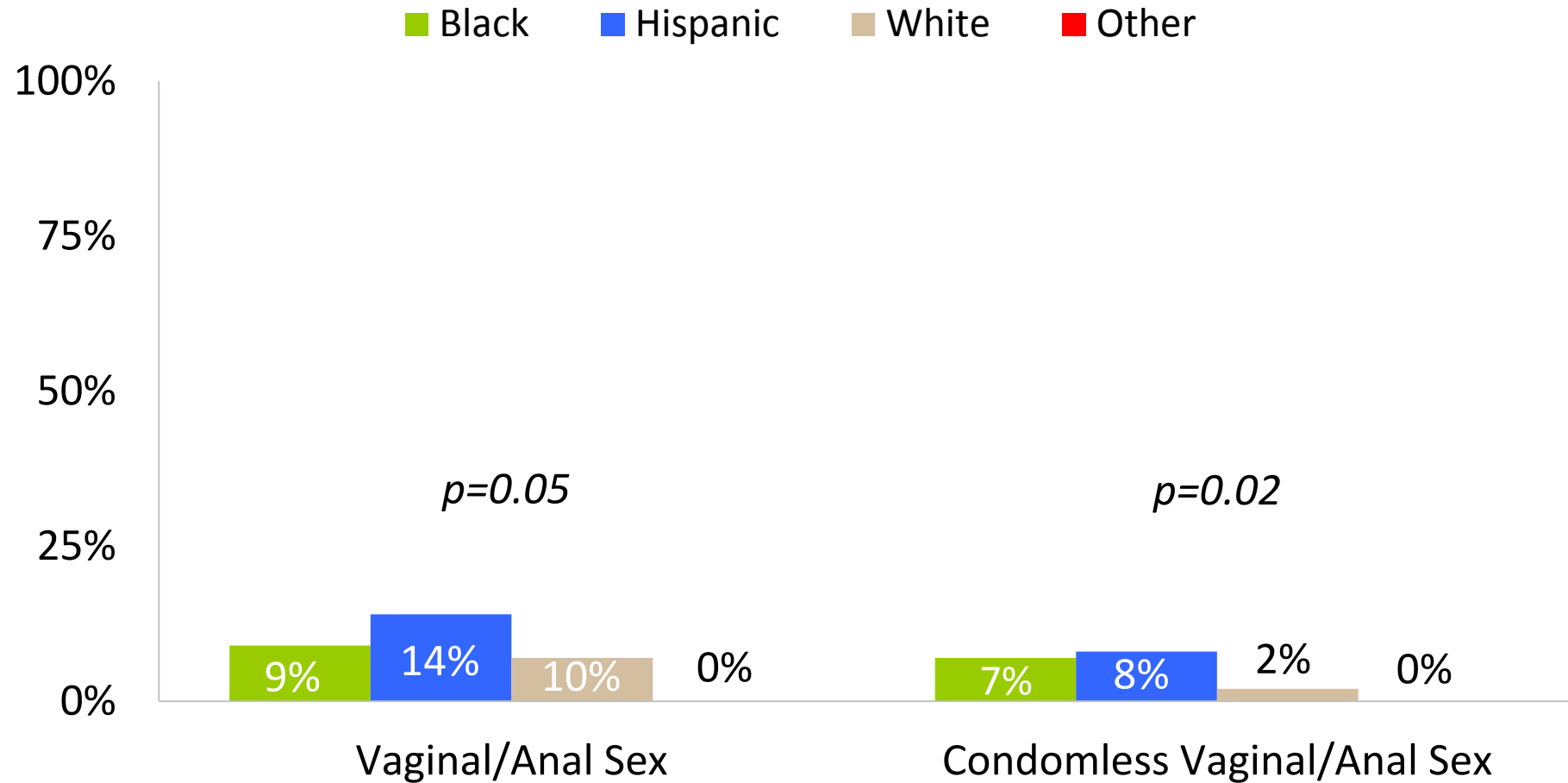
# Condomless Anal Intercourse by Partner Characteristics

NYC NHBS-MSM, 2014, n=404 (HIV-/Unk.)



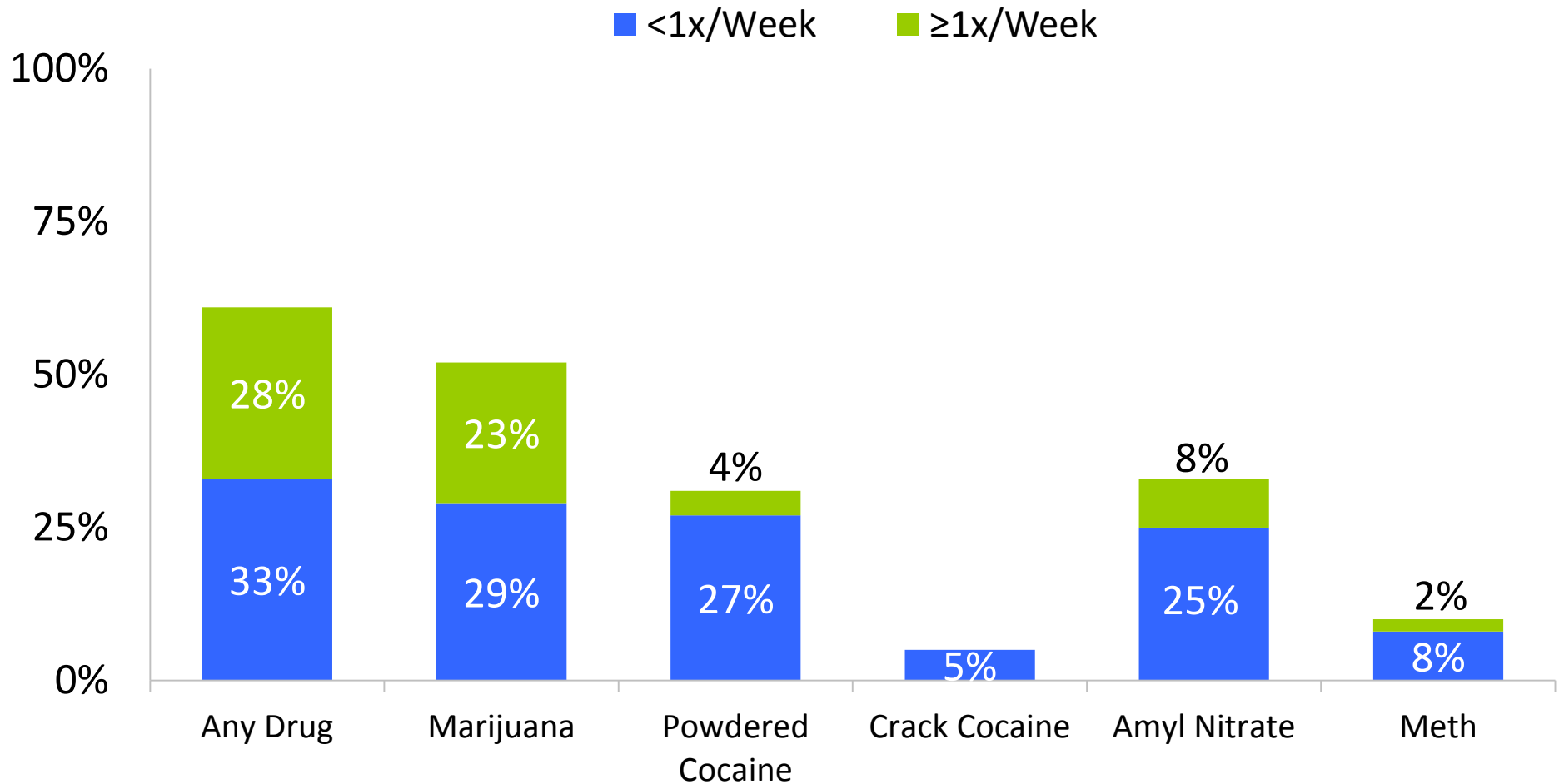
# Sex with a Woman in Past 12 Months

NYC NHBS-MSM, 2014, n=394 (reported race, HIV-/Unk.)



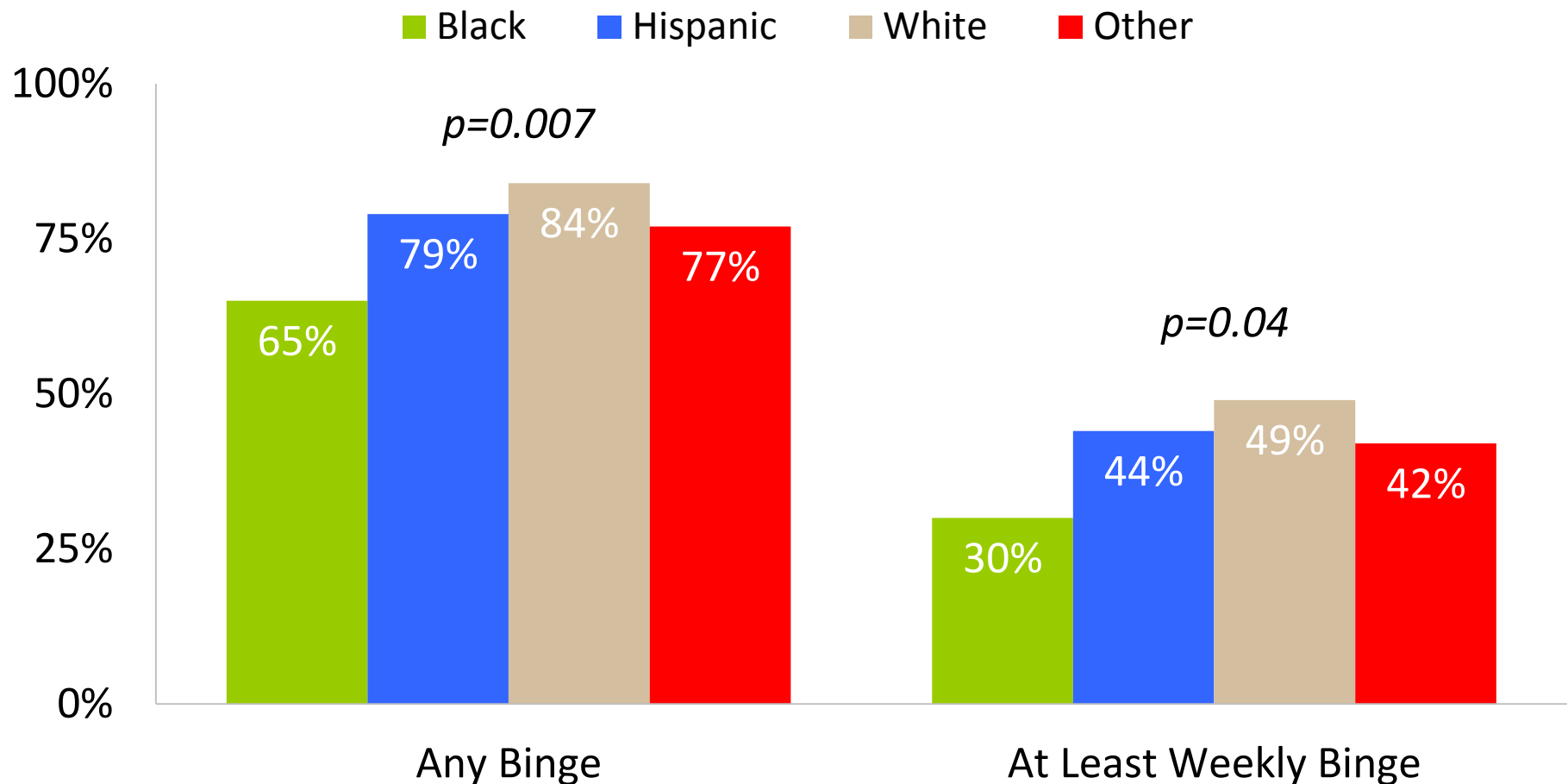
# Non-Injection Drug Use in Past 12 Months

NYC NHBS-MSM, 2014, n=476



# Binge Alcohol Use in Past 12 Months by Race/Ethnicity

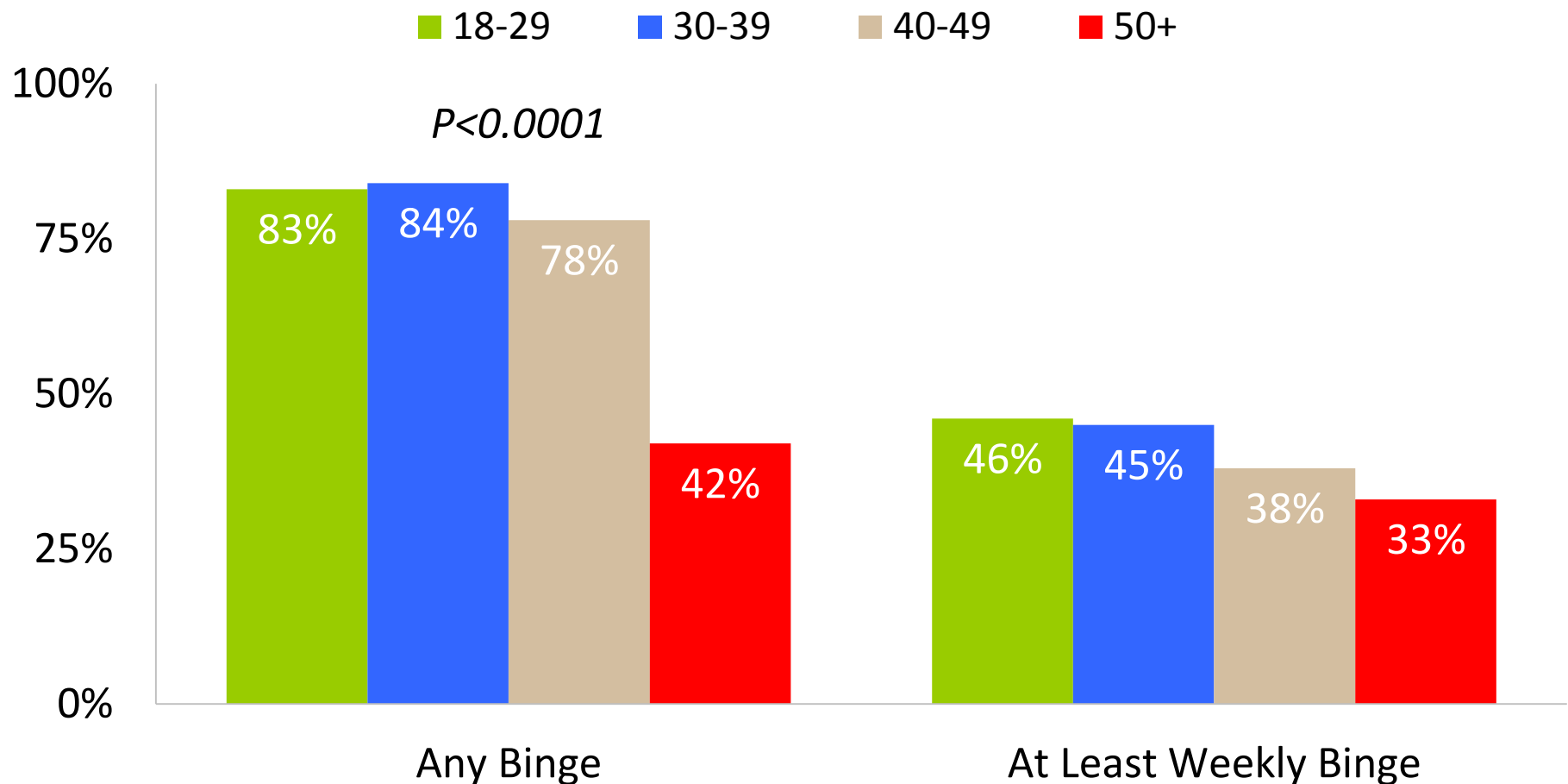
NYC NHBS-MSM, 2014, n=464 (reported race)



*Binge: 5 or more drinks in "one sitting"*

# Binge Alcohol Use in Past 12 Months by Age

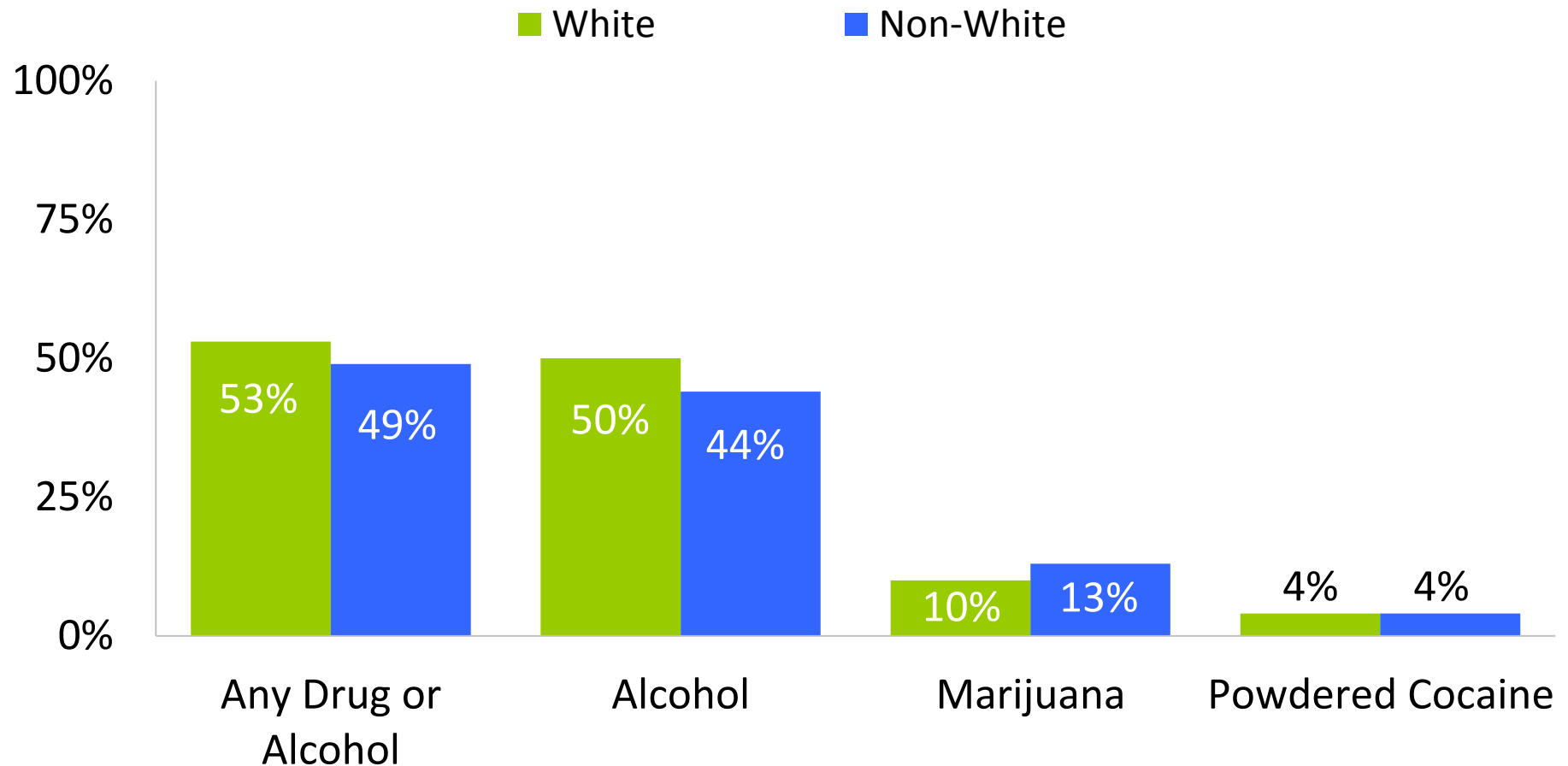
NYC NHBS-MSM, 2014, n=476



*Binge: 5 or more drinks in "one sitting"*

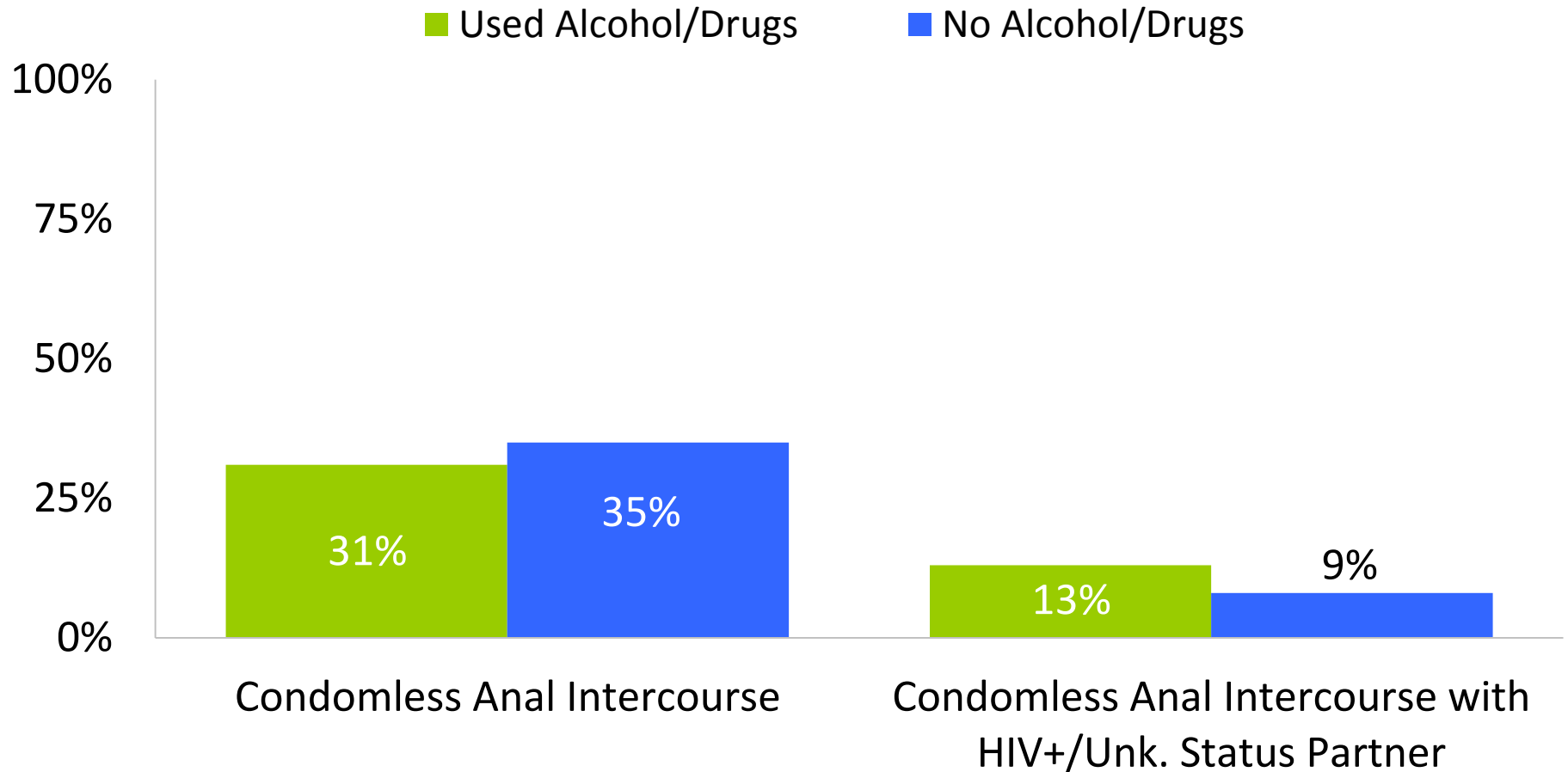
# Drug and Alcohol Use at Last Sex by Race/Ethnicity

*NYC NHBS-MSM, 2014, n=394 (reported race, HIV-/Unk.)*



# Alcohol/Drug Use and Sexual Risk at Last Sex

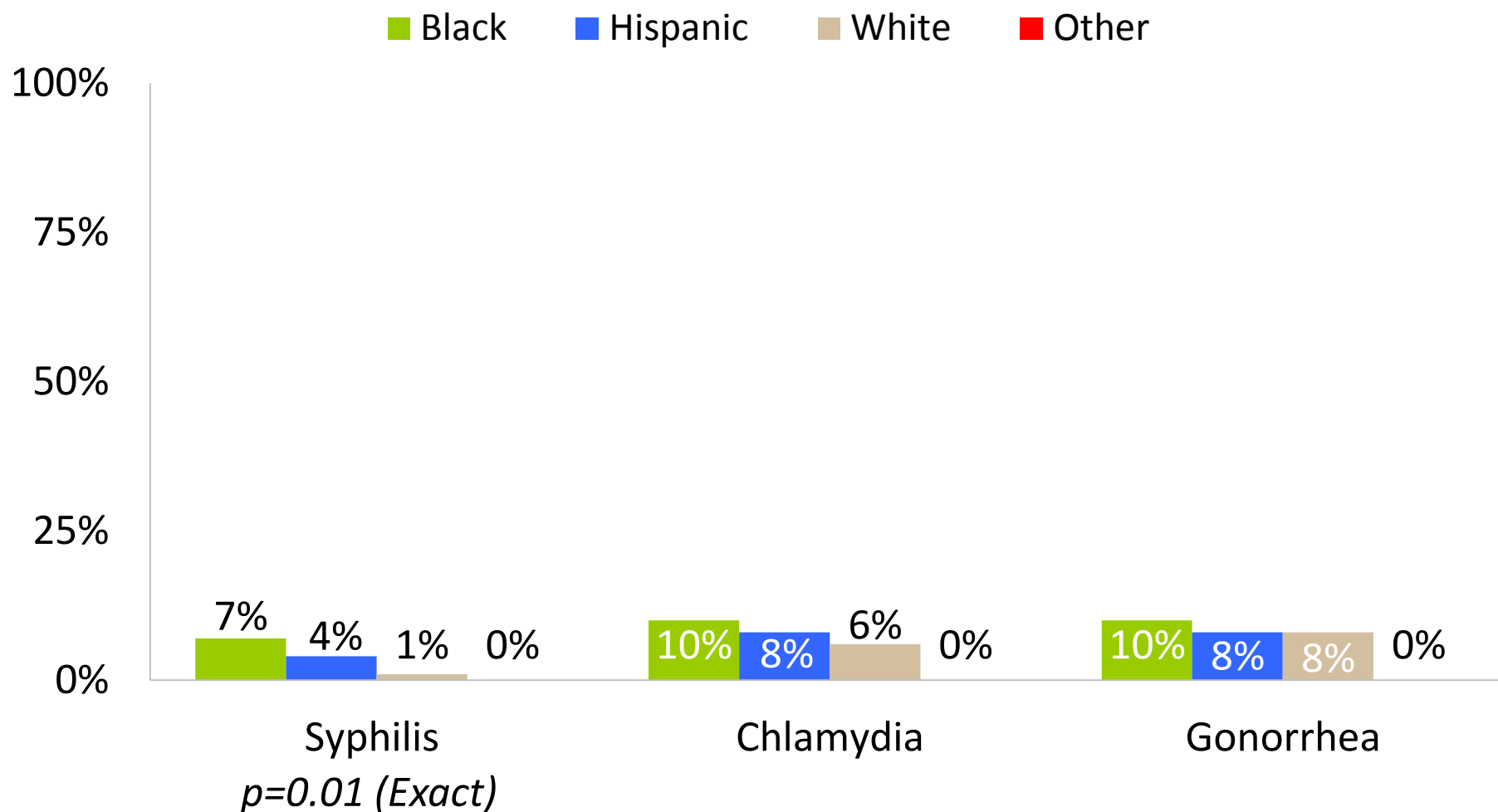
NYC NHBS-MSM, 2014, n=404 (HIV-/Unk.)





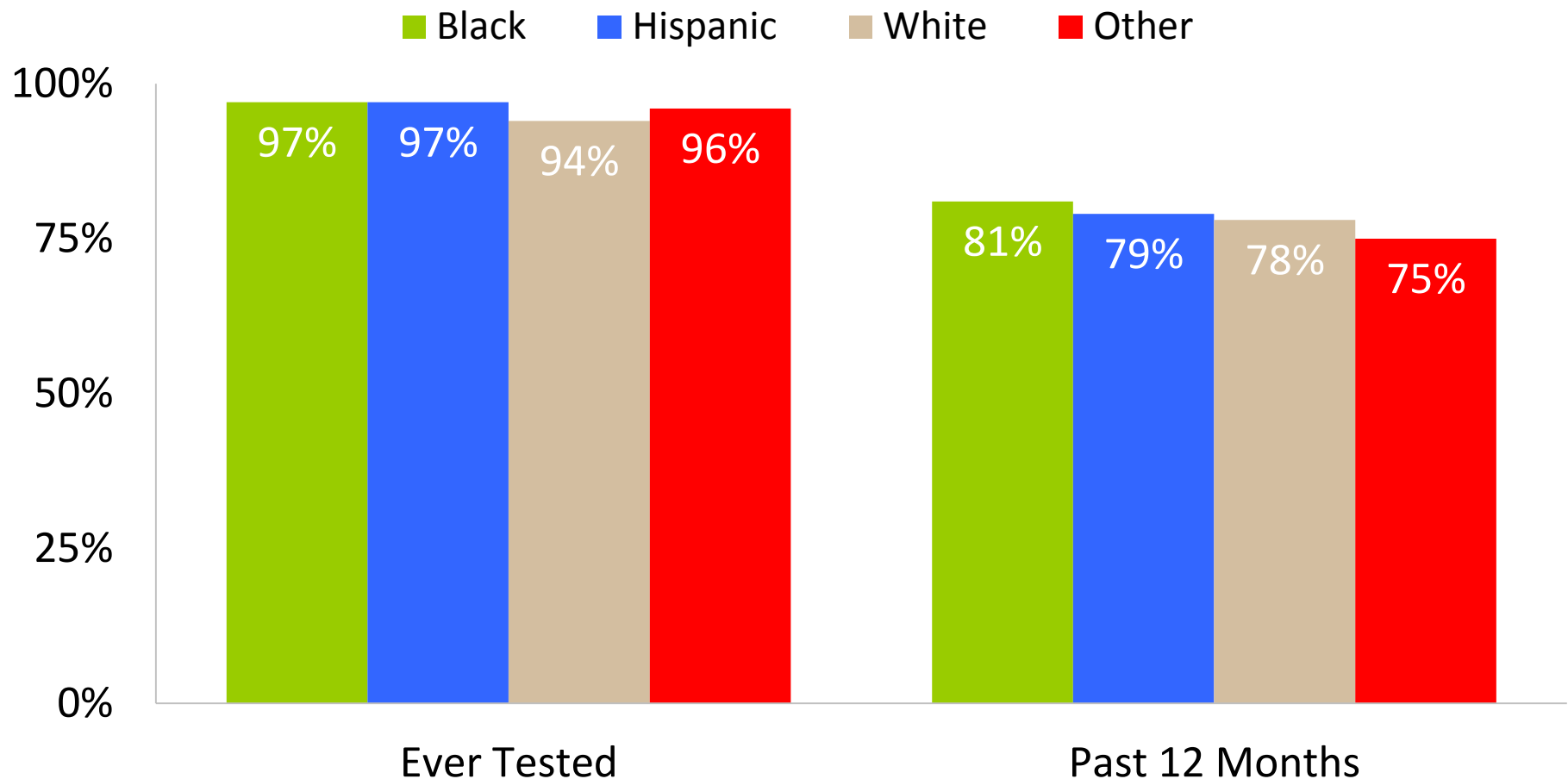
# Self-Reported Sexually Transmitted Disease (STD) Diagnosis in Past 12 Months by Race/Ethnicity

NYC NHBS-MSM, 2014, n=394 (reported race, HIV-/Unk.)



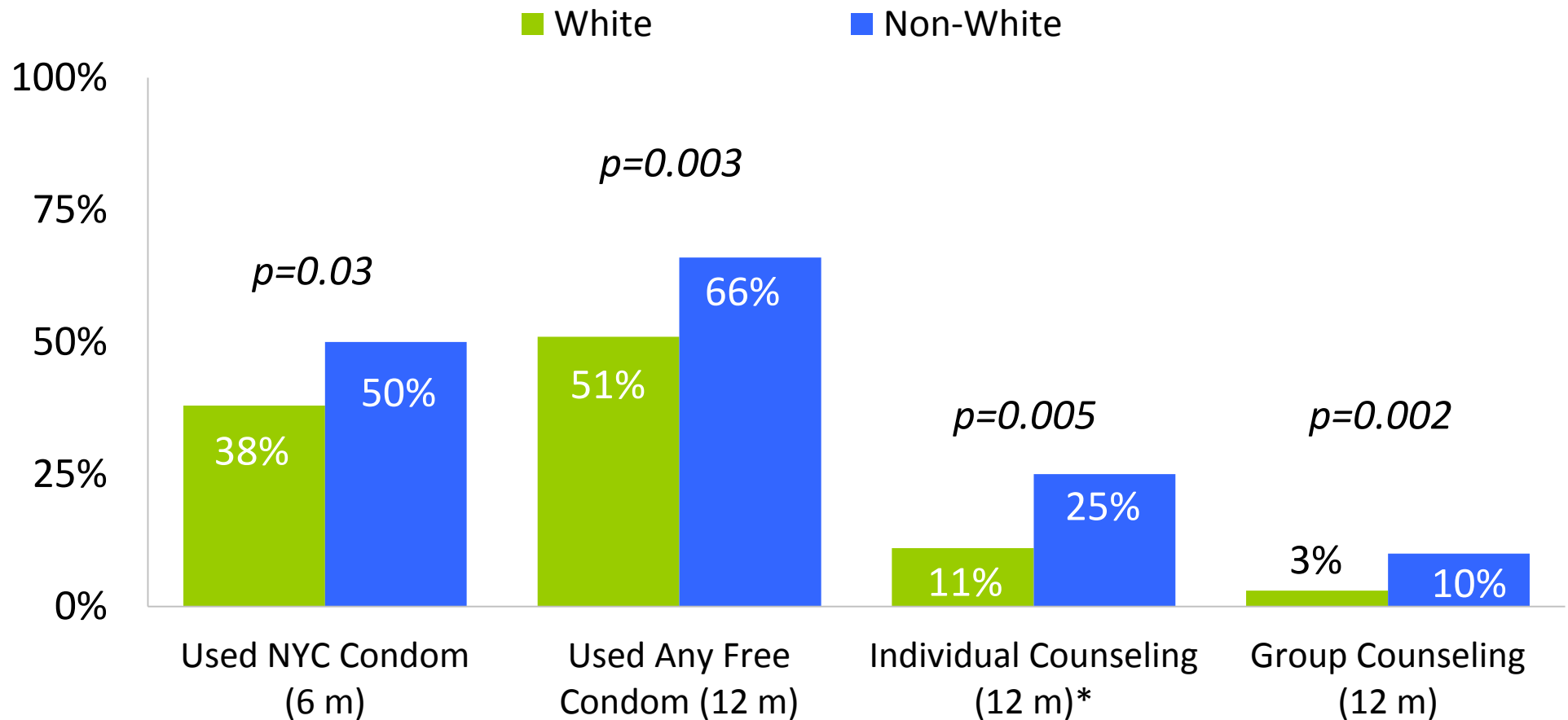
# HIV Testing History by Race/Ethnicity

*NYC NHBS-MSM, 2014, n=394 (reported race, HIV-/Unk.)*



# HIV Prevention Services

NYC NHBS-MSM, 2014, n=394 (reported race, HIV-/Unk.)



\*not including counseling as part of an HIV test

# HIV Prevalence and Awareness by Age

NYC NHBS-MSM, 2014, n=317 (tested in study)

	Tested*	HIV-Positive†	95% CI	% Unaware§
<b>Overall</b>	66.6%	14.8%	11.1% – 19.2%	4%
<b>By Age</b>				
18-29	73.9%	2.6%	0.7%-6.4%	0%
30-39	65.2%	22.8%	14.7%-32.8%	5%
40-49	59.2%	31.1%	18.2%-46.7%	7%
≥50	50.0%	33.3%	15.6%-55.3%	0%

\*p=0.005

†p<0.0001

§Among MSM who tested HIV positive (n=47)

# HIV Prevalence and Awareness by Race/Ethnicity

*NYC NHBS-MSM, 2014, n=307 (reported race, tested in study)*

	Tested	HIV- Positive*	95% CI	% Unaware†
<b>By Race/Ethnicity</b>				
Black	59.7%	28.3%	16.0%-43.5%	0%
Hispanic	67.6%	14.3%	8.0%-22.8%	14%
White	66.2%	11.9%	7.1%-18.4%	0%
Other	76.9%	5.0%	0.1%-24.9%	0%

\*p<0.03

†Among MSM who tested HIV positive (n=45)

# NYC National HIV Behavioral Surveillance Team

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## NYC Department of Health

Principal Investigator

Alan Neaigus

Project Director

Katie Reilly

Field Coordinator

Olga Gromadzka

Data Collection Team

Elaine Dillingham

Naomi Harris

Andrea Hernandez

Darrin Maxwell

Kerri O'Meally

Laura Ruiz

Field Assistants

Richard Obleton

Edwin Lopez-Cheverre

## CDC

Gabriela Paz-Bailey

Dita Broz

Trey Spiller

CDC Grant#: 1U1BPS003246-04

# Contact

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**Katie Reilly, PhD, MPH**

NHBS Project Director

HIV Epidemiology Program

NYC Department of Health

Phone: 347-396-7755

Email: [kreilly3@health.nyc.gov](mailto:kreilly3@health.nyc.gov)