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

Results from the 2011 National HIV Behavioral Surveillance Study





# 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 new infections
- Nationally, HIV incidence has increased among young, black MSM (Prejean, 2011)
- The risk factors for this disparity are not well understood
  - Factors such as unprotected sex, drug use, STDs, risk networks, testing behaviors may drive HIV among black MSM





# National HIV Behavioral Surveillance (NHBS)

- 20 metropolitan statistical areas throughout the United States and Puerto Rico
- Funded by CDC, designed collaboratively
- Ongoing, cyclical study of three risk groups: MSM, IDU, and high-risk heterosexuals
- Third cycle of NHBS-MSM data collection in 2011
- Cross-sectional study design





# NHBS Objectives

- 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**

- 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

- Universe of MSM-oriented venues constructed
  - Bars, clubs, parks restaurants, gyms, public strolls
- 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
    - 2597 counted
    - 1503 (58%) approached
    - 557 (37%) screened
    - 536 (96%) eligible and interviewed
    - 510 (95%) active NYC MSM
    - 448 (88%) self-reported HIV-/Unknown
    - 418 (93%) HIV tested





# Statistical Analysis

- Basic descriptive frequencies of demographics, risks, and use of HIV testing and prevention services among NYC MSM active in past 12 months (n=510)
- Chi-Square tests 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=448), since awareness of HIV infection influences risk
  - Overall prevalence of HIV infection determined by confirmed western blot test among those who tested (n=475)
    - Awareness of HIV status, among those who tested HIV+ (n=91)





# Demographics

Race/Ethnicity		Age	
Black	23%	18-29	52%
Hispanic	39%	30-39	22%
White	29%	40-49	17%
Other	9%	50+	8%
Sexual orientation		Birthplace	
Sexual orientation  Gay	78%	<b>Birthplace</b> United States	78%
_	78% 19%	•	78% 3%
Gay		United States	





# Demographics

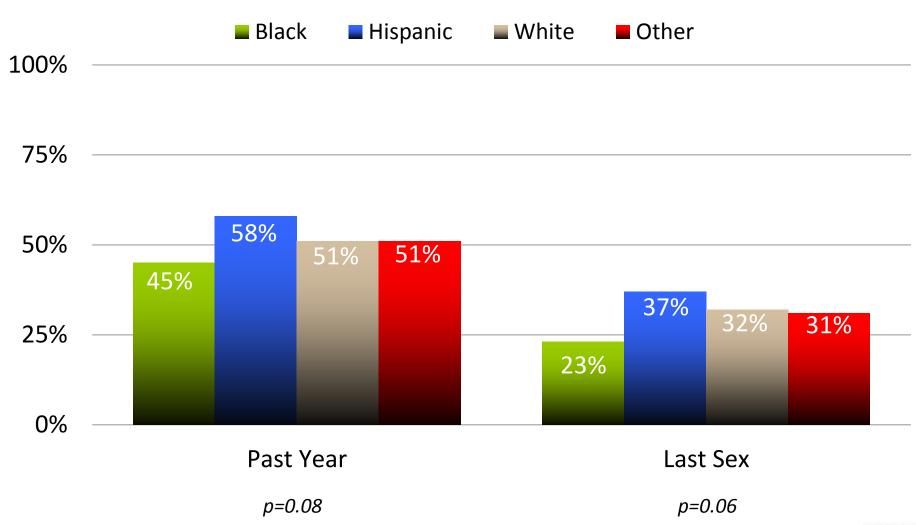
Income		Education	
<10k	19%	<high school<="" th=""><th>9%</th></high>	9%
10k-30k	33%	H.S Some College	65%
30k-50k	20%	≥College Grad	26%
>50k	27%		





#### UAI in Past Year and Last Sex by Race/Ethnicity

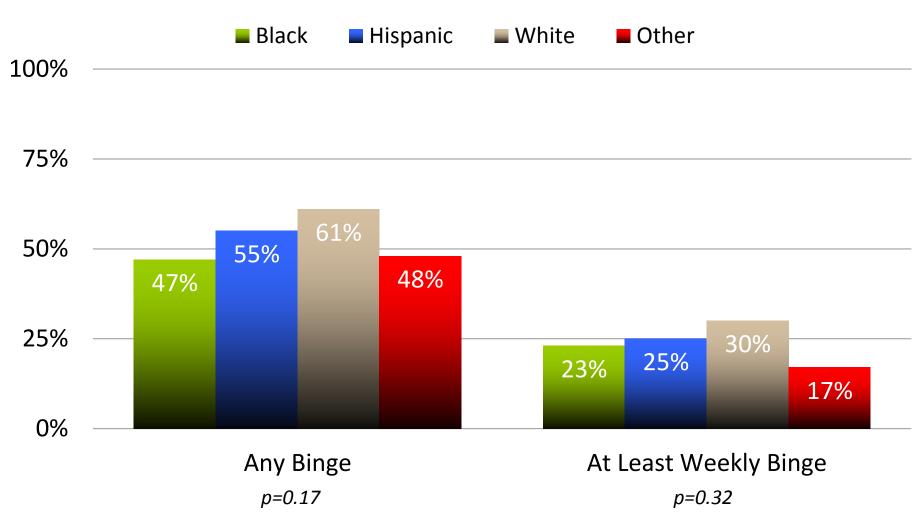
NYC NHBS-MSM, 2011, n=448 (HIV-/Unk.)







#### Binge Alcohol Use in Past Year by Race/Ethnicity

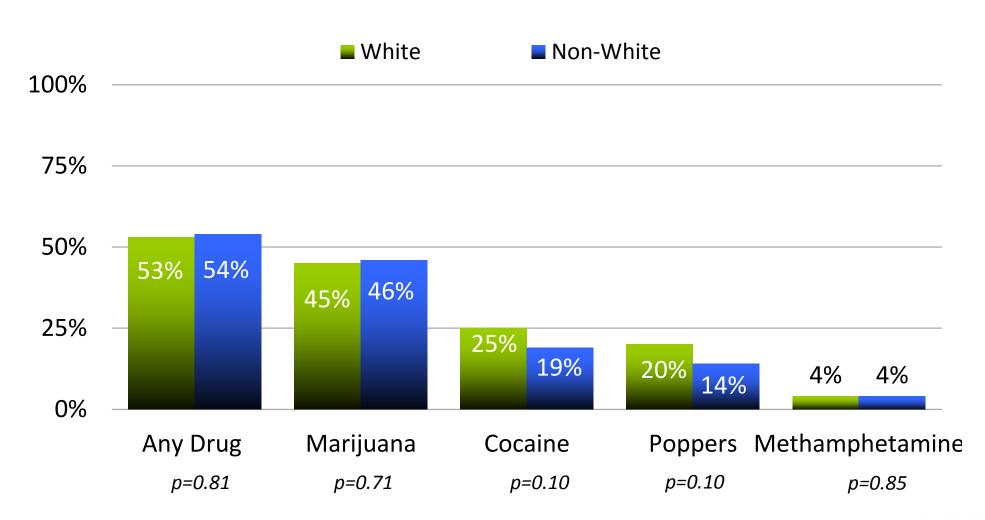








#### Non-Injection Drug Use in Past Year



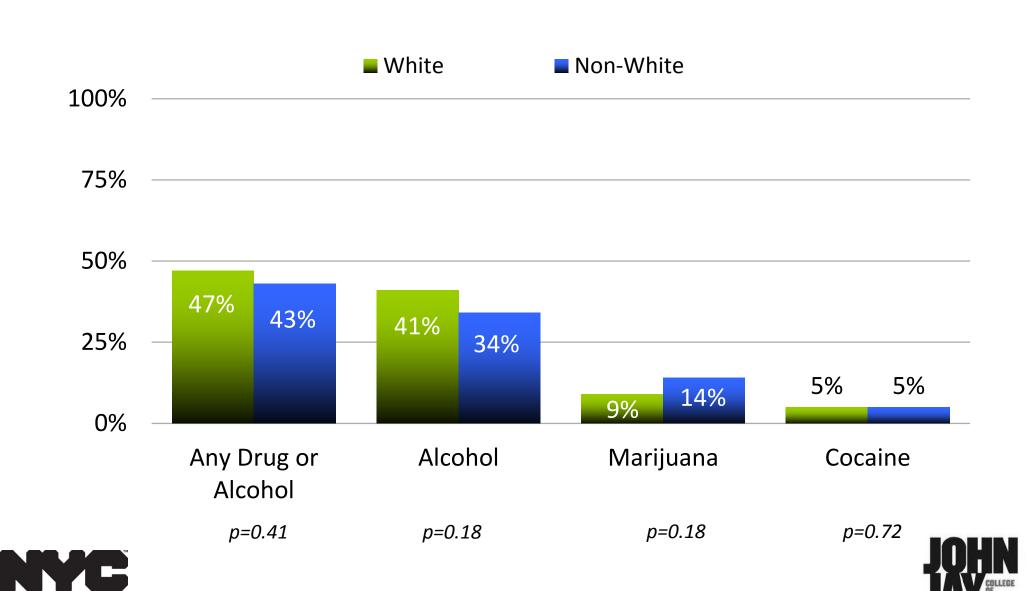




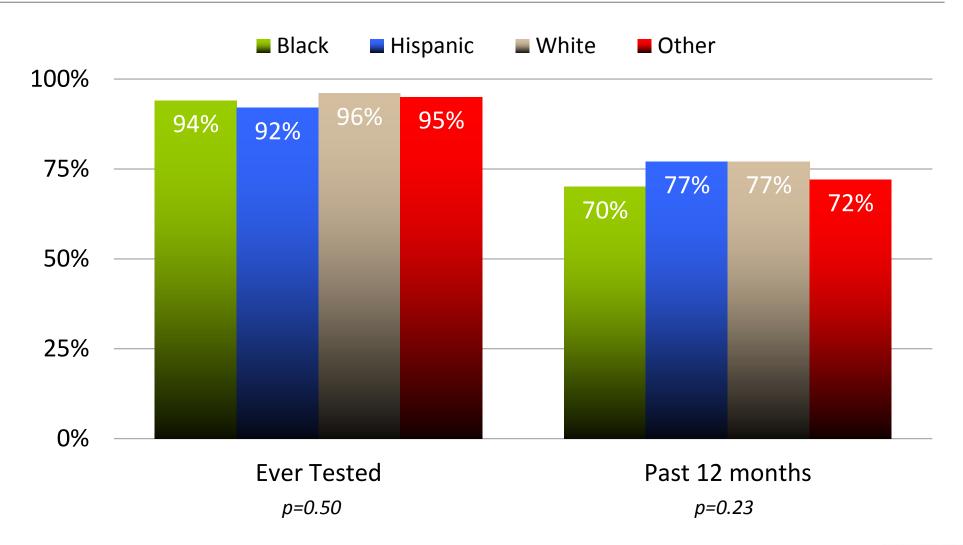
#### Alcohol & Drug Use at Last Sex

NYC NHBS-MSM, 2011, n=448 (HIV-/Unk.)

Health



# HIV Testing NYC NHBS-MSM, 2011, n=448 (HIV-/Unk.)







#### **HIV Prevalence & Awareness**

NYC NHBS-MSM, 2011, n=475 (Tested in Study)

	HIV-Positive	95% CI	% Unaware*
Overall	19.2%	15.6 – 22.7%	40%
By Race			
Black	41.9%	32.5% - 51.3%	45%
Hispanic	15.0%	9.9% - 20.1%	46%
White	10.6%	5.6% - 15.7%	7%
Other	10.0%	0.7 - 19.3%	50%
	p=0.004		p=0.02†

\* Among MSM who tested HIV positive (n=91)

†Fisher's Exact Test





### HIV Prevalence by Age

NYC NHBS-MSM, 2011, n=475 (Tested in Study)

	Black	Hispanic	White	Other	Overall	P-value
Age						
18-29	32.1%	9.0%	10.0%	7.1%	13.8%	0.05
30-39	38.9%	25.0%	8.3%	11.1%	20.0%	0.04*
40-49	64.7%	17.6%	10.7%	33.3%	25.6%	0.0004*
≥50	52.9%	50.0%	17.6%	0.0%	37.5%	0.11*





#### NYC National HIV Behavioral Surveillance Team

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