

# Chicago Meningococcal Outbreak Survey Results

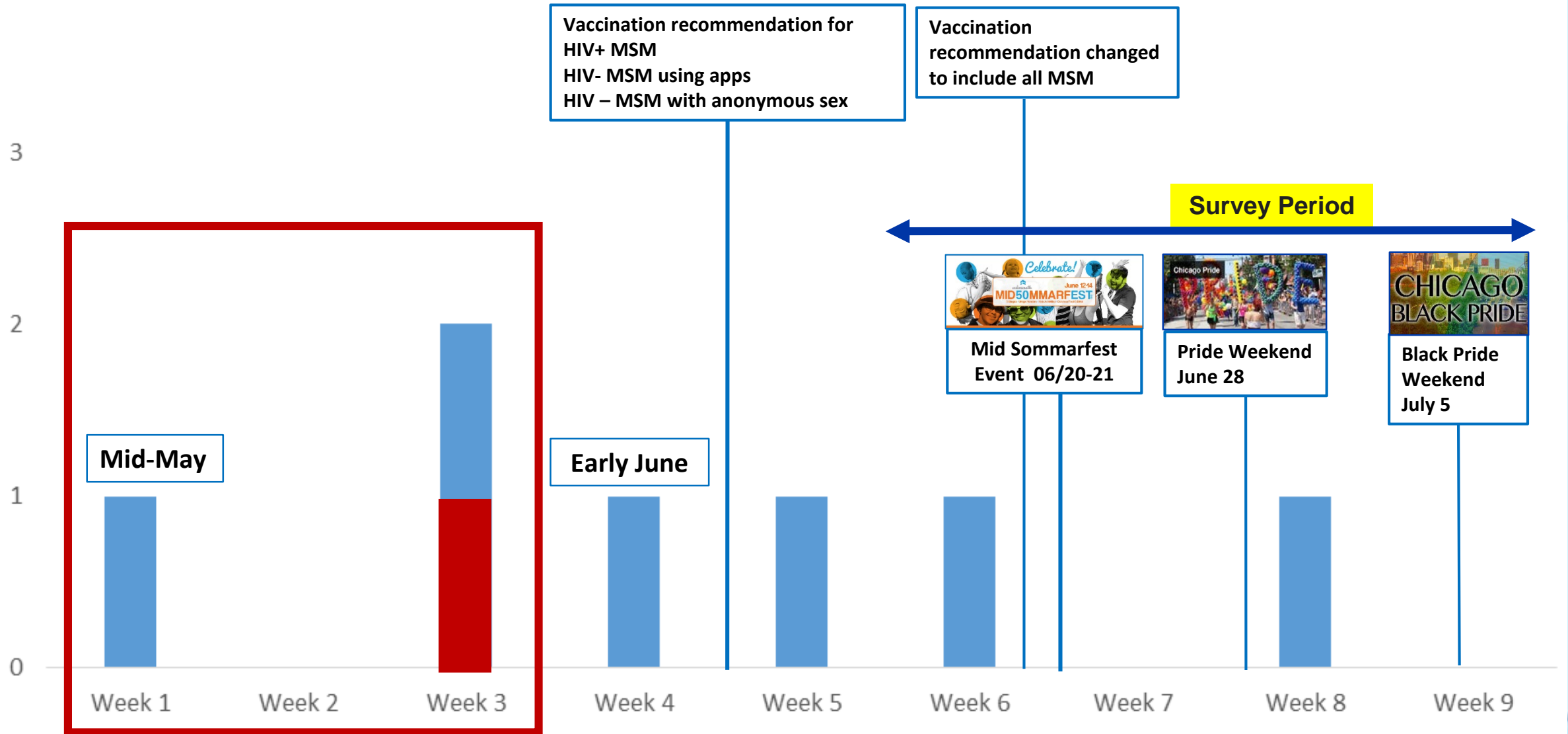
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EIS Officer, MVPD Branch

National Center for Immunization and Respiratory Diseases  
Centers for Disease Control and Prevention (CDC)



# Epi-Curve/ Events timeline

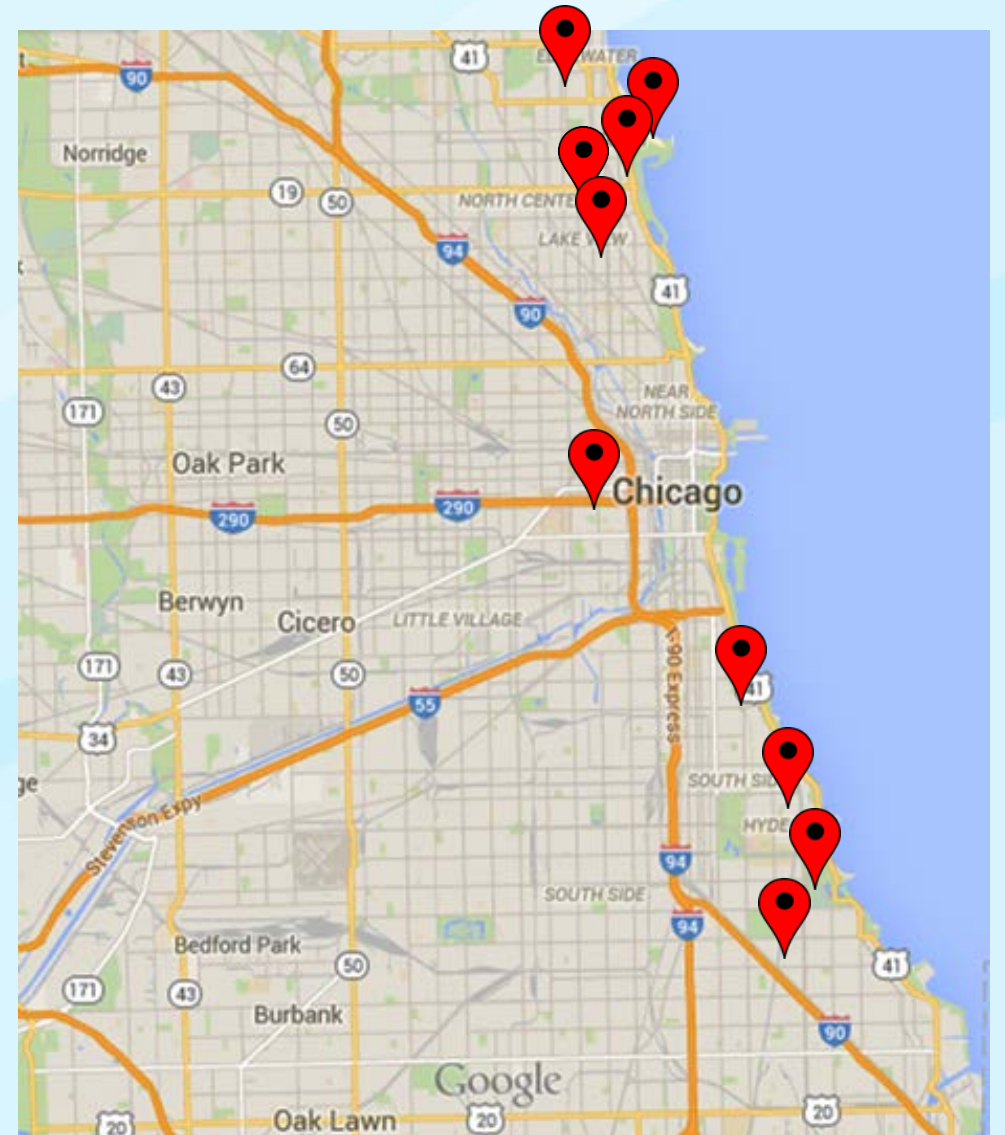


## Survey Administration

- **Objectives**
  - **To know the population demographics of those taking the vaccine**
  - **Assess the appropriate communications platform to reach the AA MSM community**
  - **Assess invasive meningococcal disease risk factor prevalence in the population**
- **Designed with technical inputs from CDC's STD and MVPD Branch and CDPH**
- **Piloted in a MSM focused clinic and revised after feedback**
- **Surveys were administered in clinics, events and during night outreaches in bars and clubs**
- **1276 surveys administered. 1162 surveys included in the analysis**

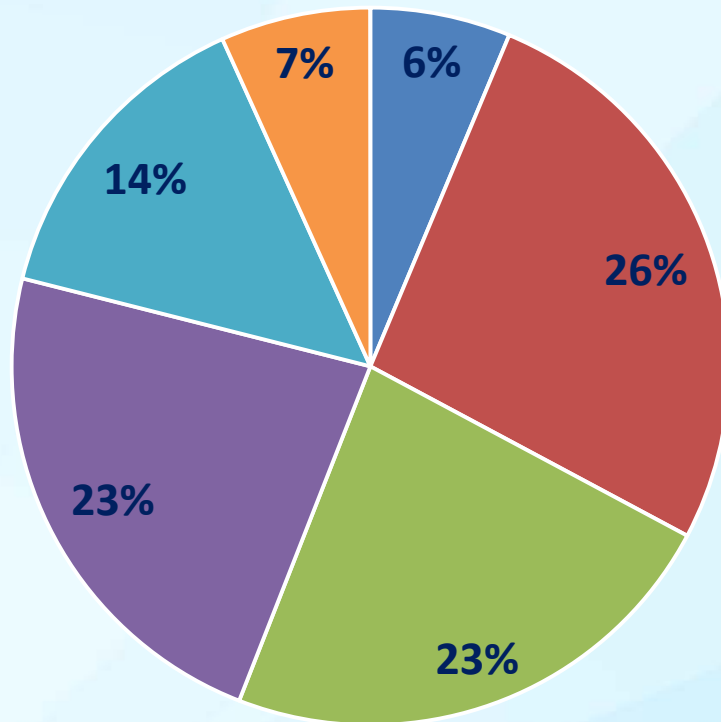
## Survey Sites

- **Events (N=916):**
  - Center on Halstead (Pride Fest)
  - MidSommarfest
  - Pride at Montrose Park
  - Events organized by South Side Help Center
- **Clinics(N=189):**
  - Howard Brown Health Center
  - CORE Center
  - Northwestern Lakeview Clinic
  - Komed Health Center
- **Other Venues(N=57):**
  - Jackson Park
  - Club Escape

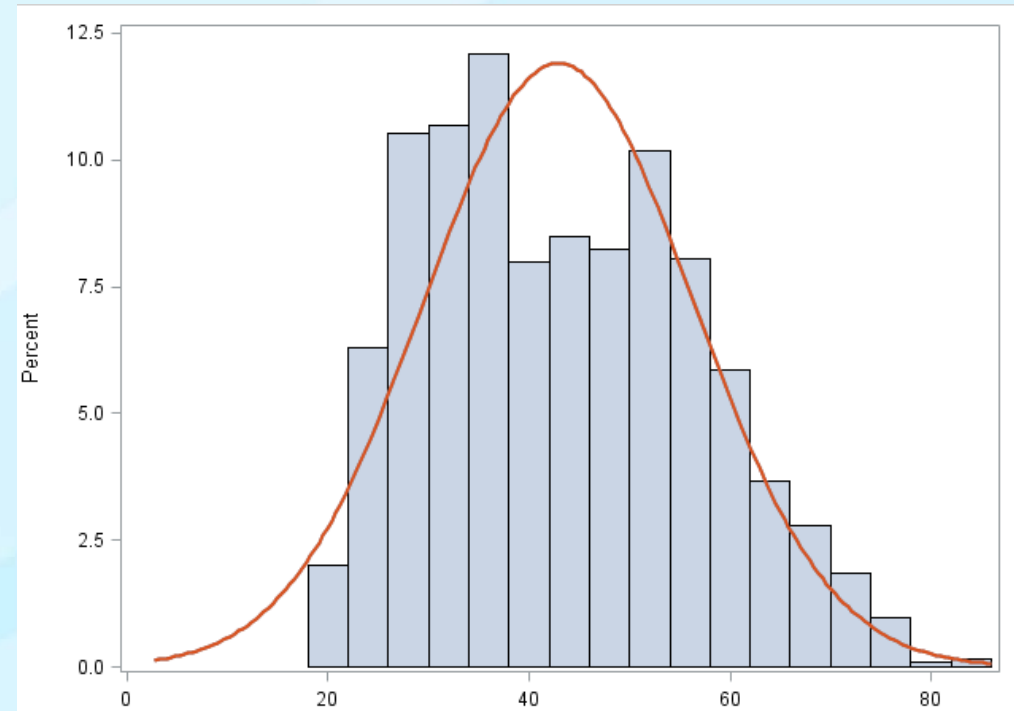


# Results: Demographics

## Demographics: Age distribution

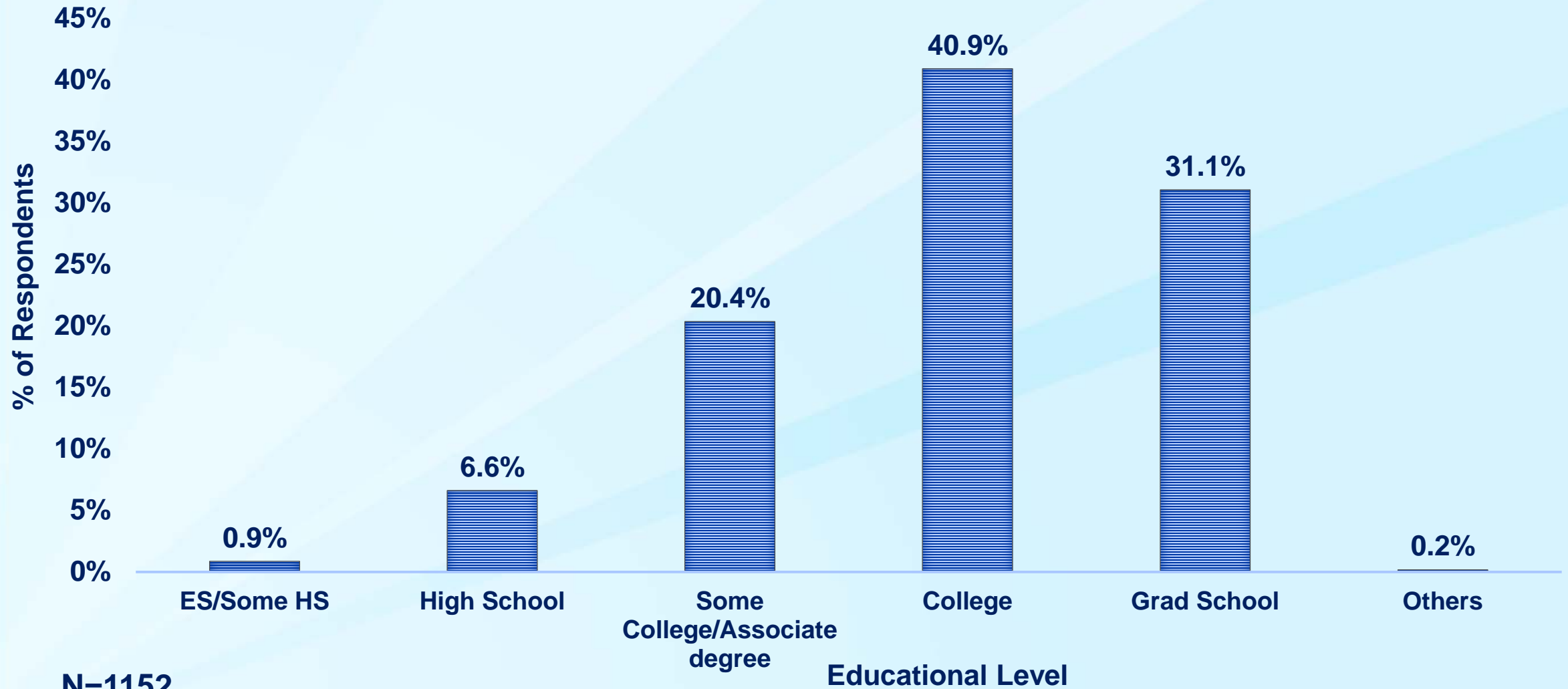


■ 18-24yrs ■ 25-34yrs ■ 35-44yrs ■ 45-54yrs ■ 55-64yrs ■ ≥ 65yrs



N	Mean	Median	Minimum	Maximum	Std Dev
1141	42.92	42	19	85	13.41

## Demographics: Educational Level



N=1152

# Educational level by Race/Ethnicity

45%  
40%  
35%  
30%  
25%  
20%  
15%  
10%  
5%  
0%

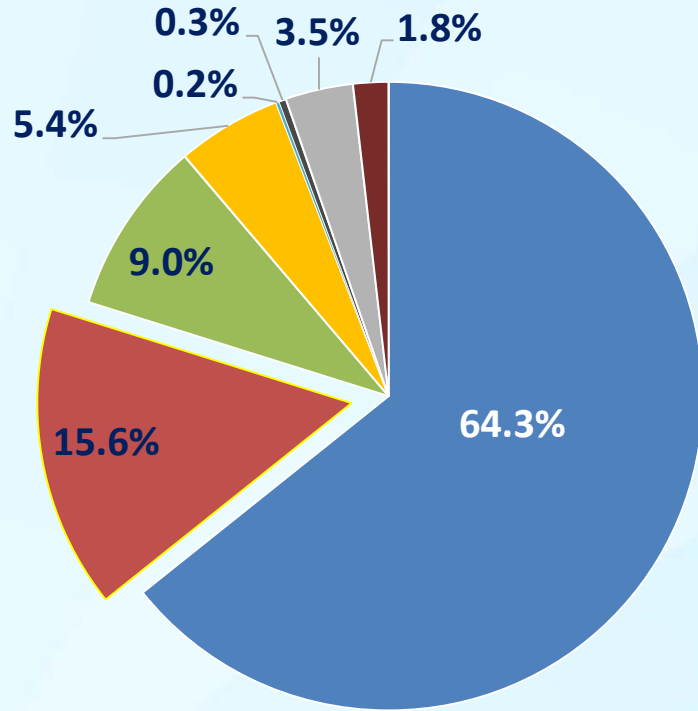
**N=1152**  
**P<0.005**

	ES/Some HS	High School	Some College/Associate	College	Grad School	Other
Other MSM	0.18%	0.78%	1.91%	3.65%	3.04%	0.00%
WhiteMSM	0.35%	2.43%	9.20%	27.60%	22.74%	0.09%
HispanicMSM	0.26%	0.78%	2.69%	2.95%	1.30%	0%
BlackMSM	0.35%	2.43%	5.90%	3.73%	2.17%	0.09%
AsianMSM	0%	0.17%	0.61%	2.86%	1.74%	0%



# Demographics: Race/Ethnicity

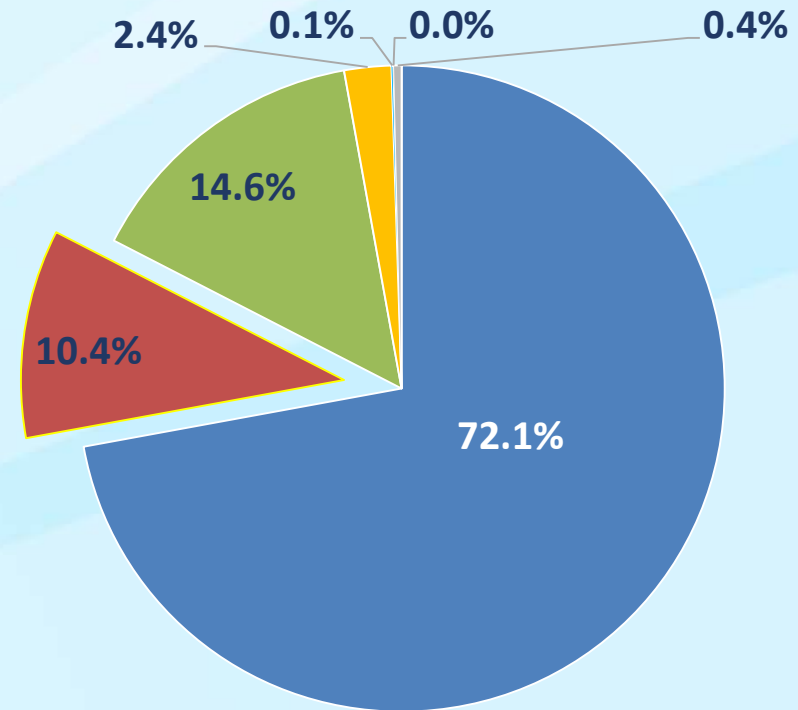
Survey (N=1,153)



- White/Caucasian
- Black/AA
- Hispanic
- Asian
- American Indian/Alaska Native
- Mixed Raced
- Others
- Hawaiian/Pacific Islander

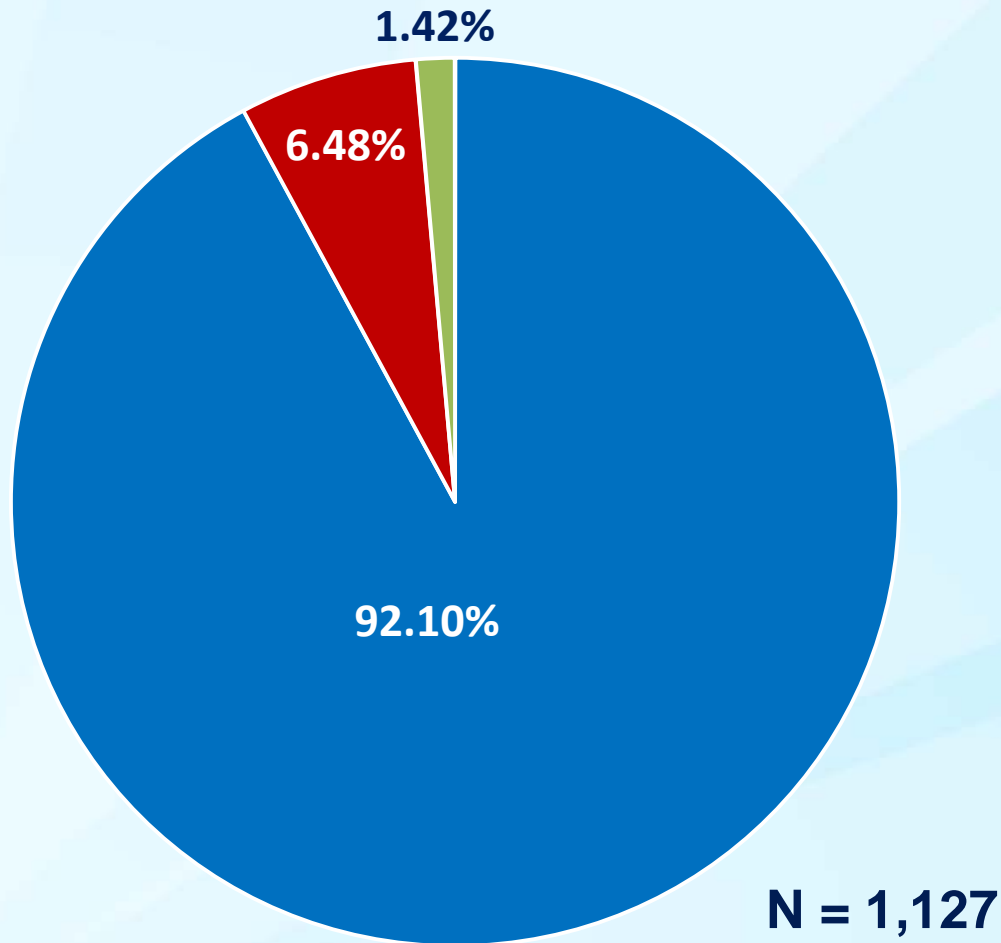
Statewide Estimation of Racial/Ethnic Populations of Men Who Have Sex with Men (N=319,438)

Lieb S. et al, 2011

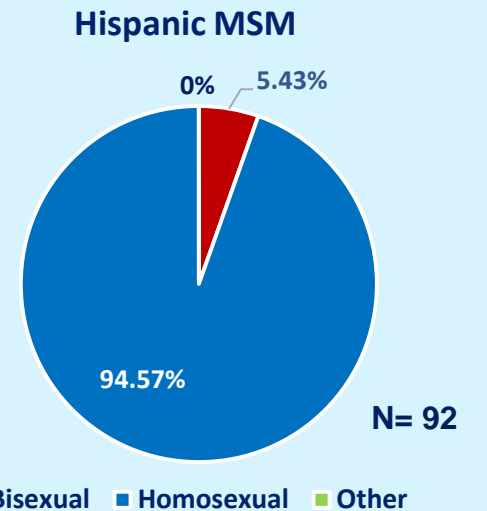
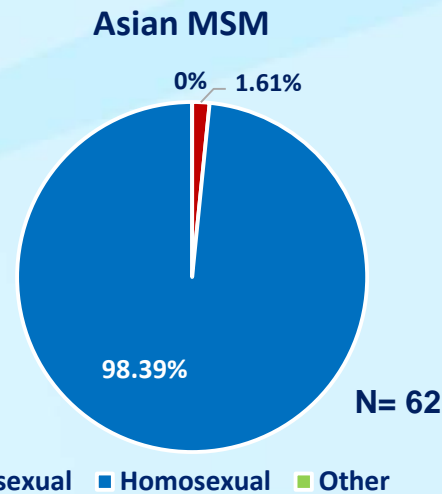
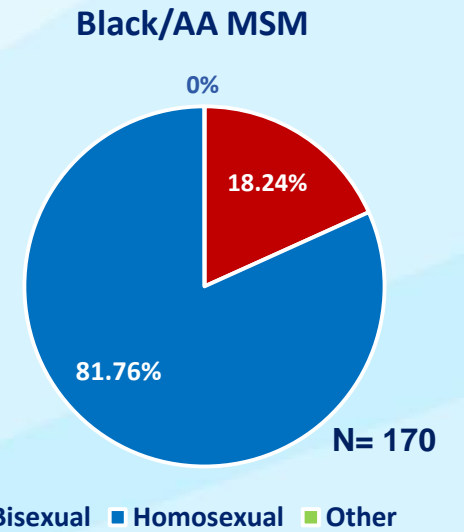
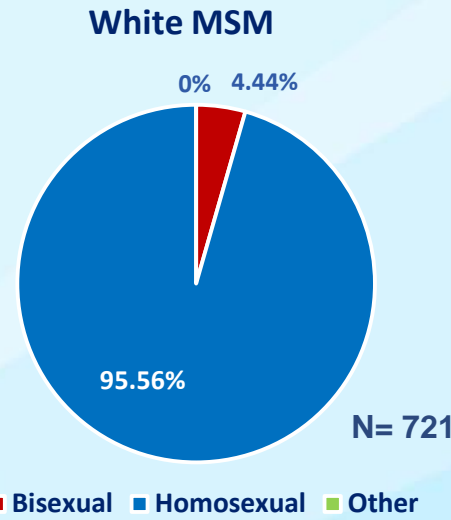


- White
- Black
- Hispanic
- Asian
- American Indian/Alaska Native
- Hawaiian/Pacific Islander
- Others

# Demographics: Sexual Orientation



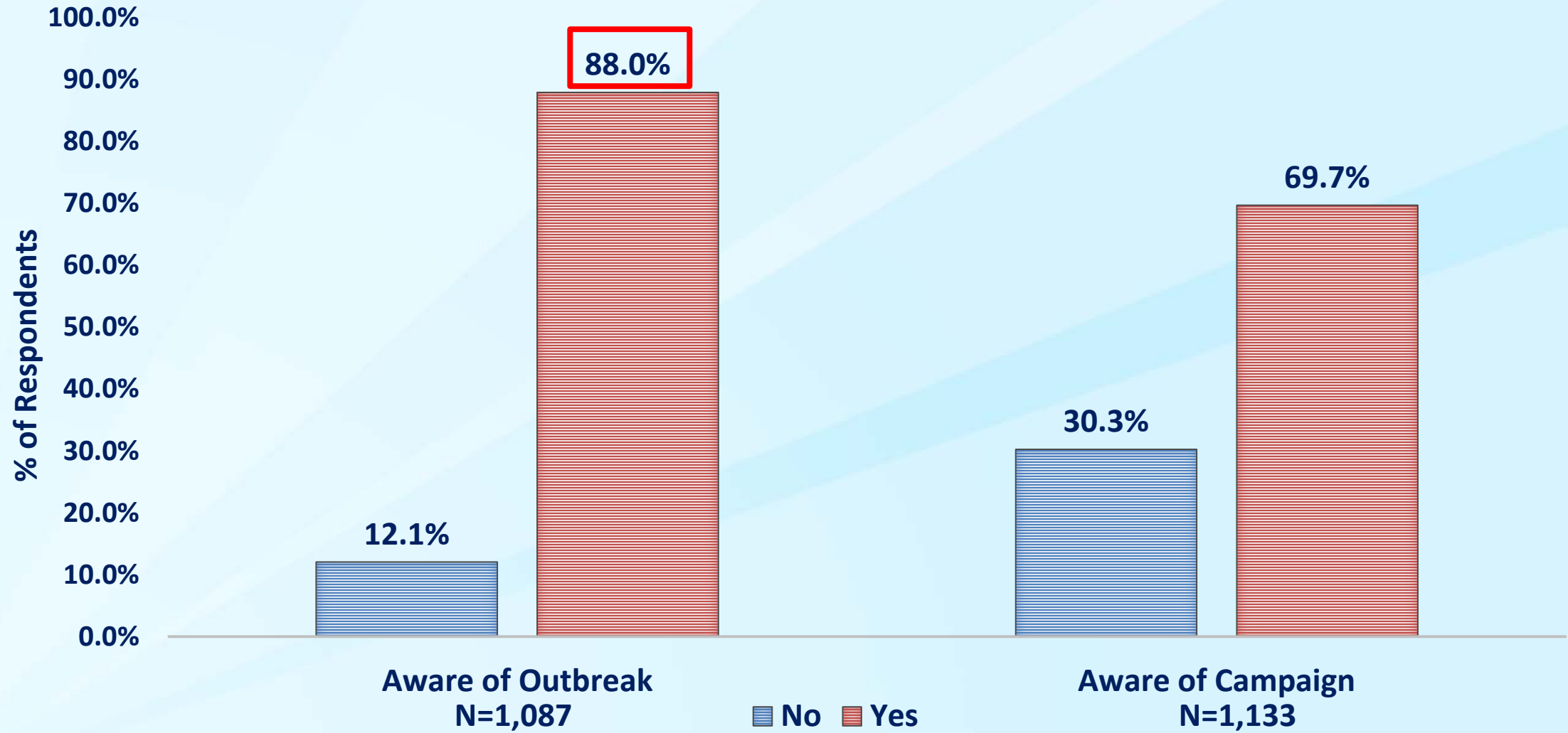
■ Homosexual ■ Bisexual ■ Others (Queer)



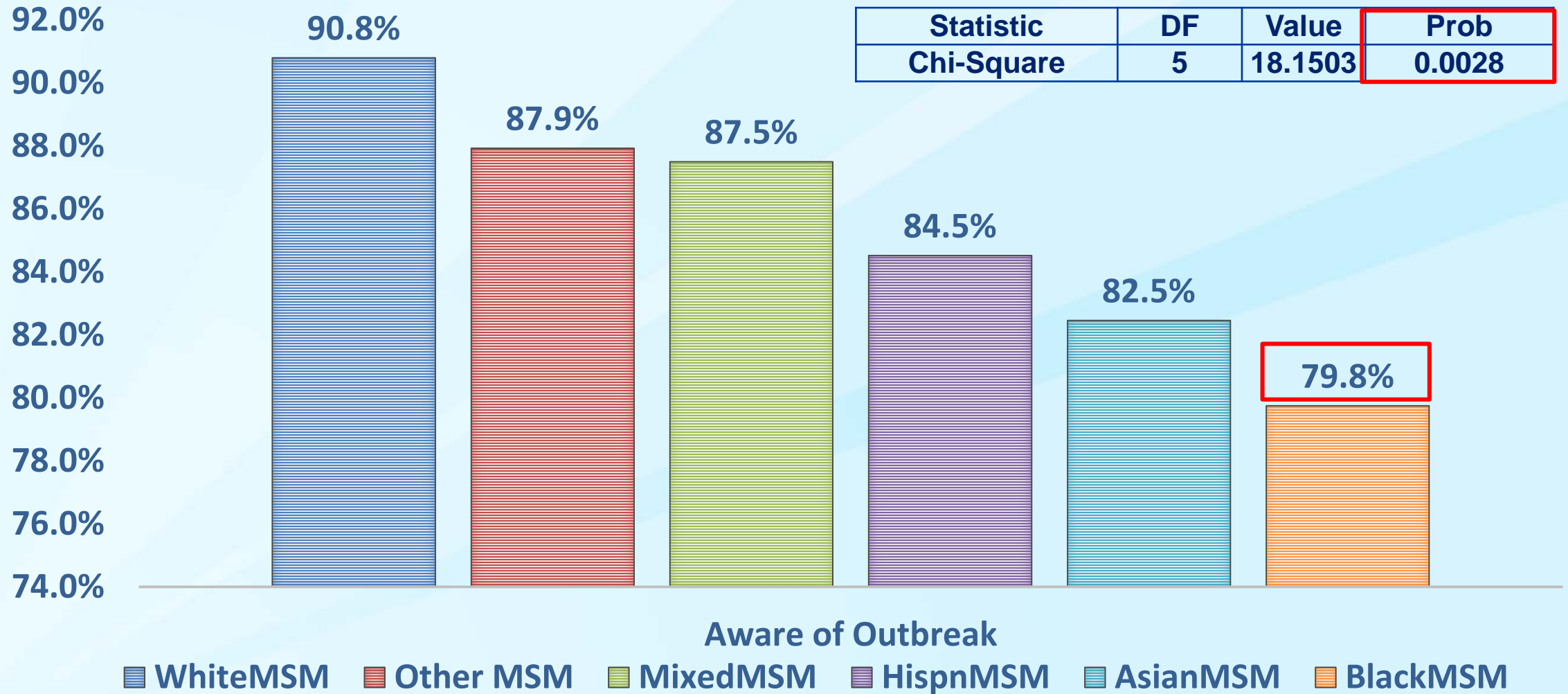
**P<.0001**

# **Knowledge, Attitudes and Behaviour**

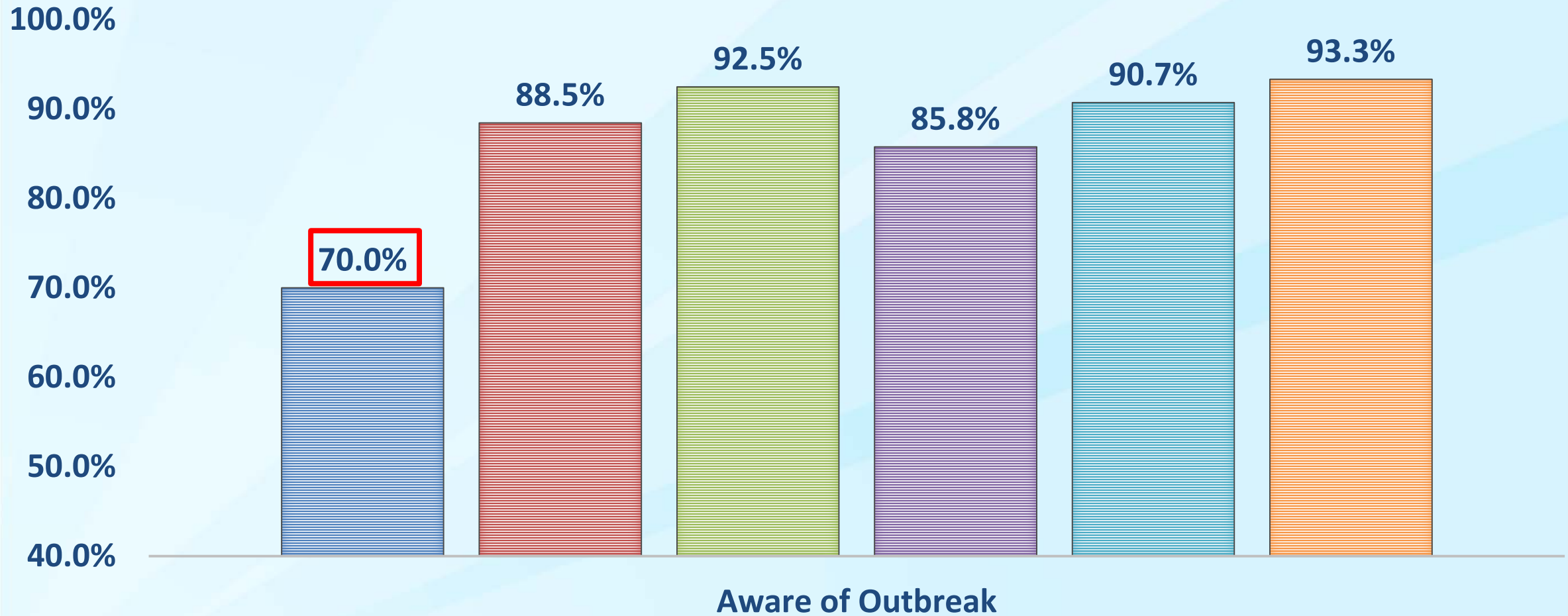
## Awareness of Outbreak/Vaccine Campaign



## Awareness of Outbreak by Race



## Awareness of Outbreak by Age group

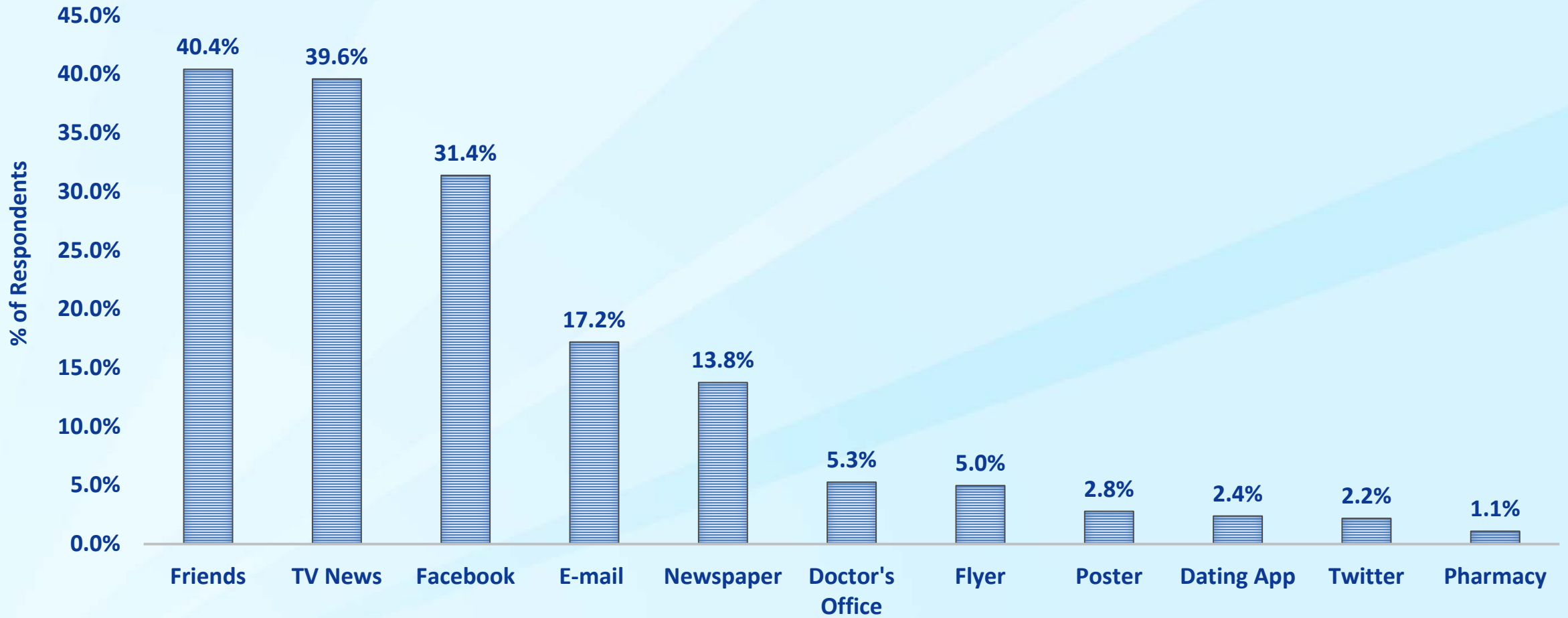


Statistic	DF	Value	Prob
Chi-Square	5	32.9845	<.0001

### Aware of Outbreak

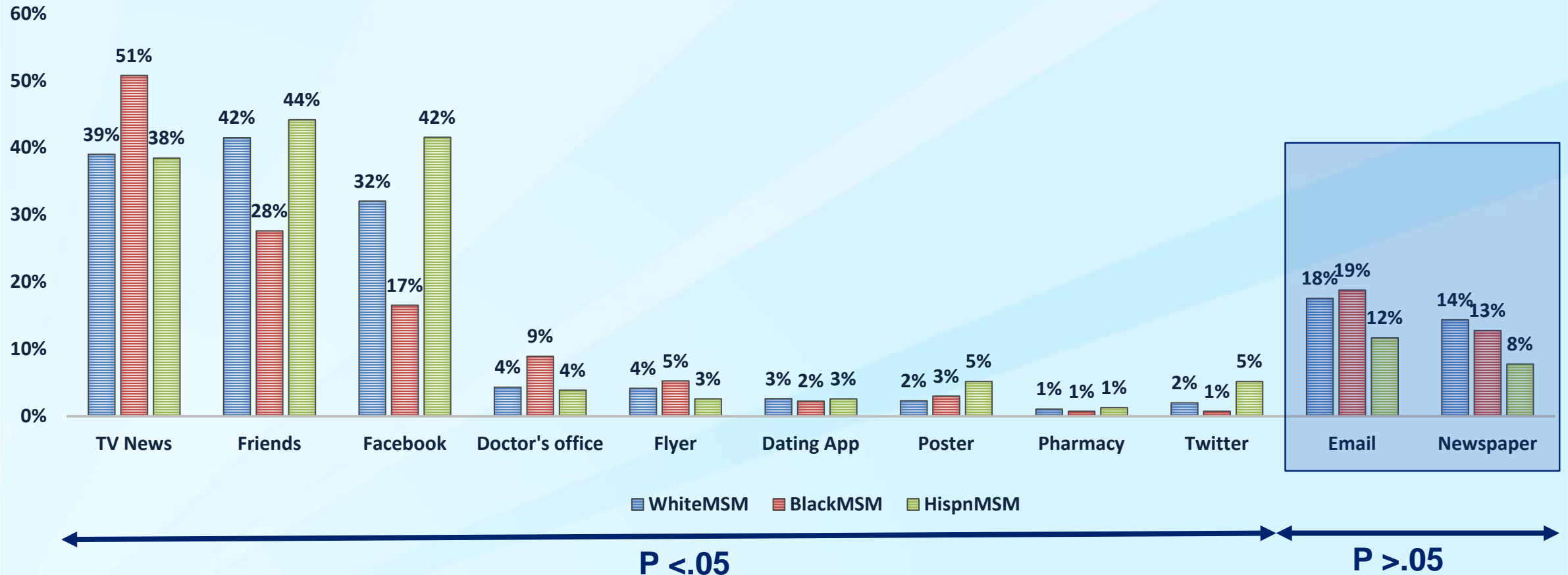
■ 18-24  
 ■ 25-34  
 ■ 35-44  
 ■ 45-54  
 ■ 55-64  
 ■ ≥65

# Sources of Information about Outbreak (All respondents)



N=1,006

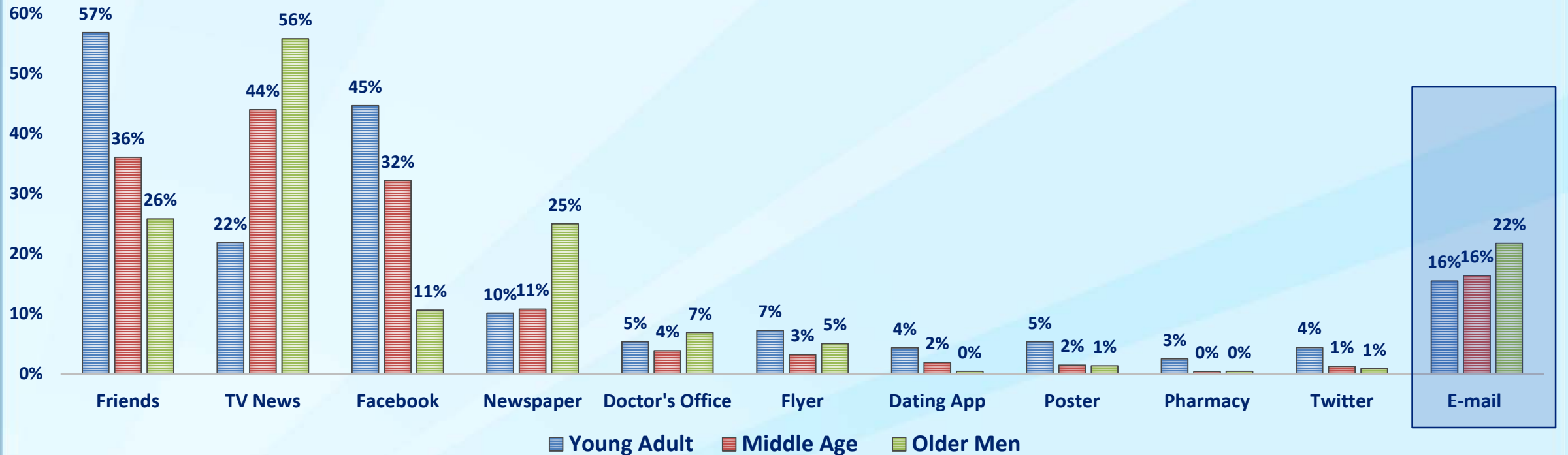
# Sources of Information about Outbreak by Race/Ethnicity



\*No statistically significant association between Race/Ethnicity of Respondents and Email or Newspaper



# Sources of Information about Outbreak by Age group



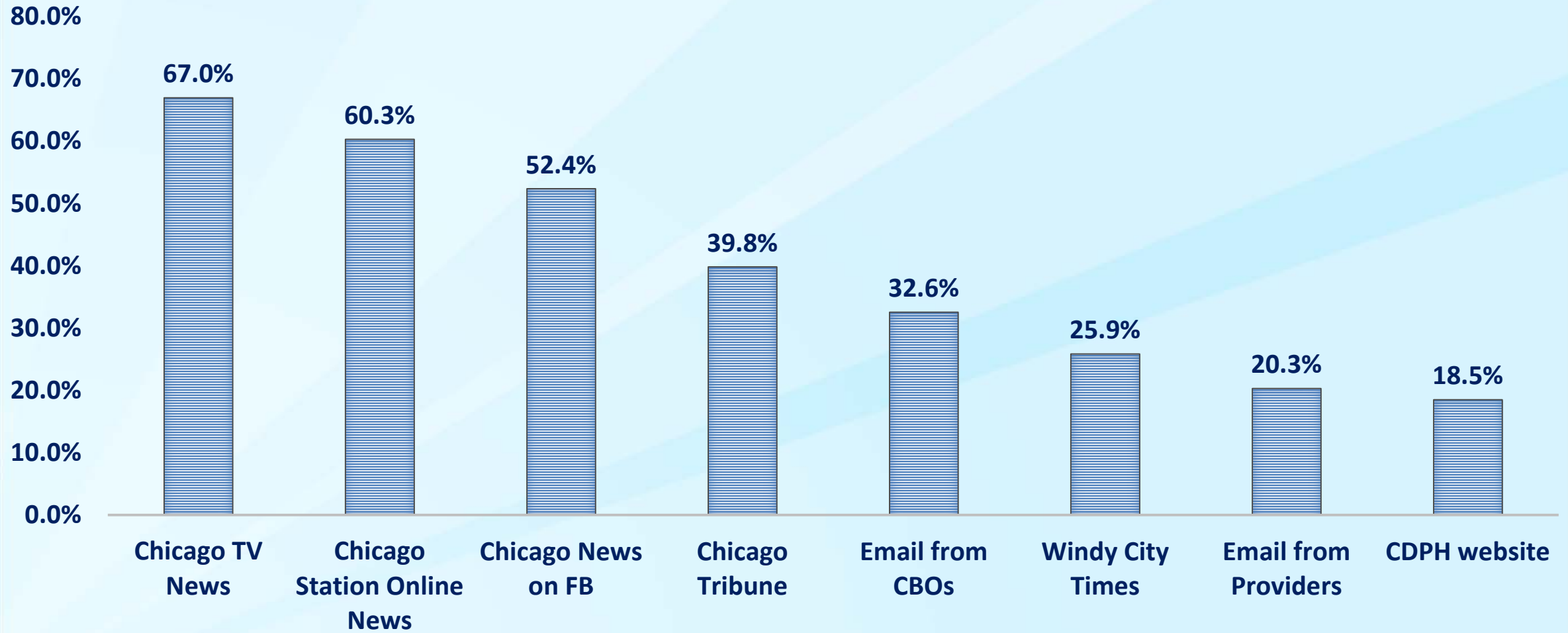
**P <.05**

**P >.05**

Young Adult	Middle Age	Older Men
18-34years	35-54 years	≥55 years

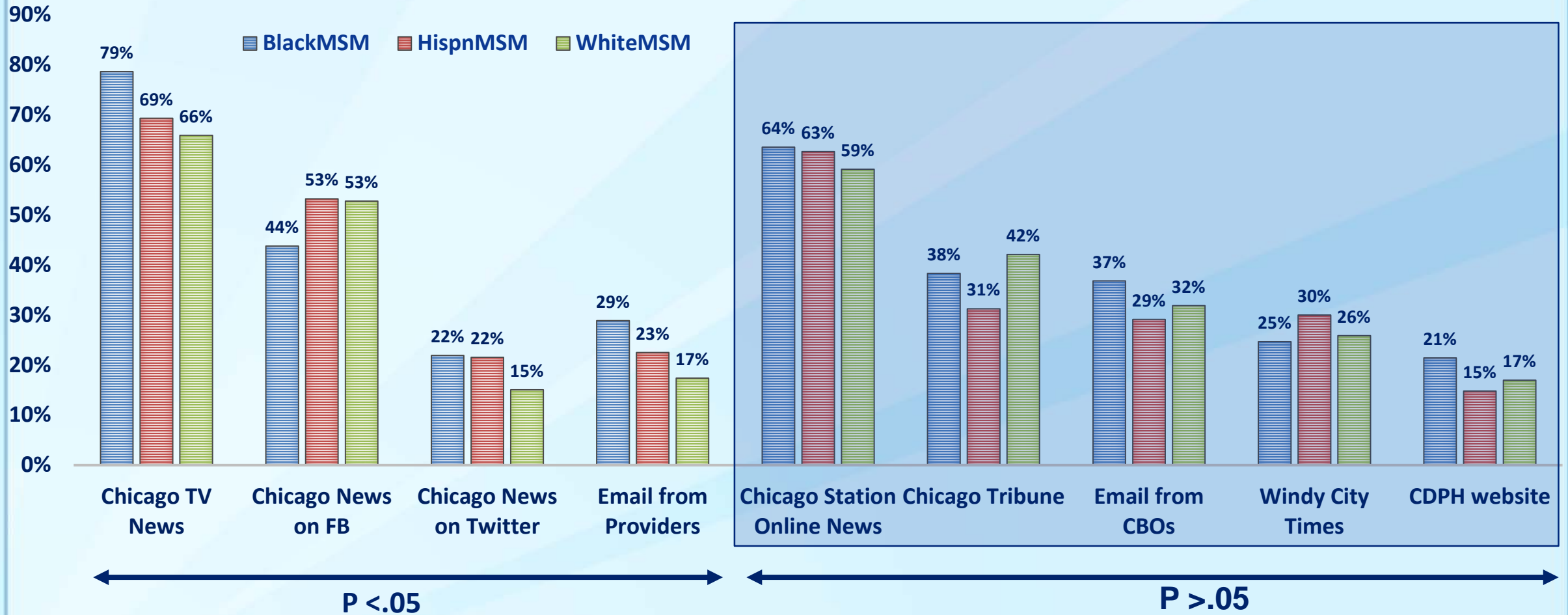
\*No statistically significant association between Age group of Respondents and Email

## Sources of general information in the past week



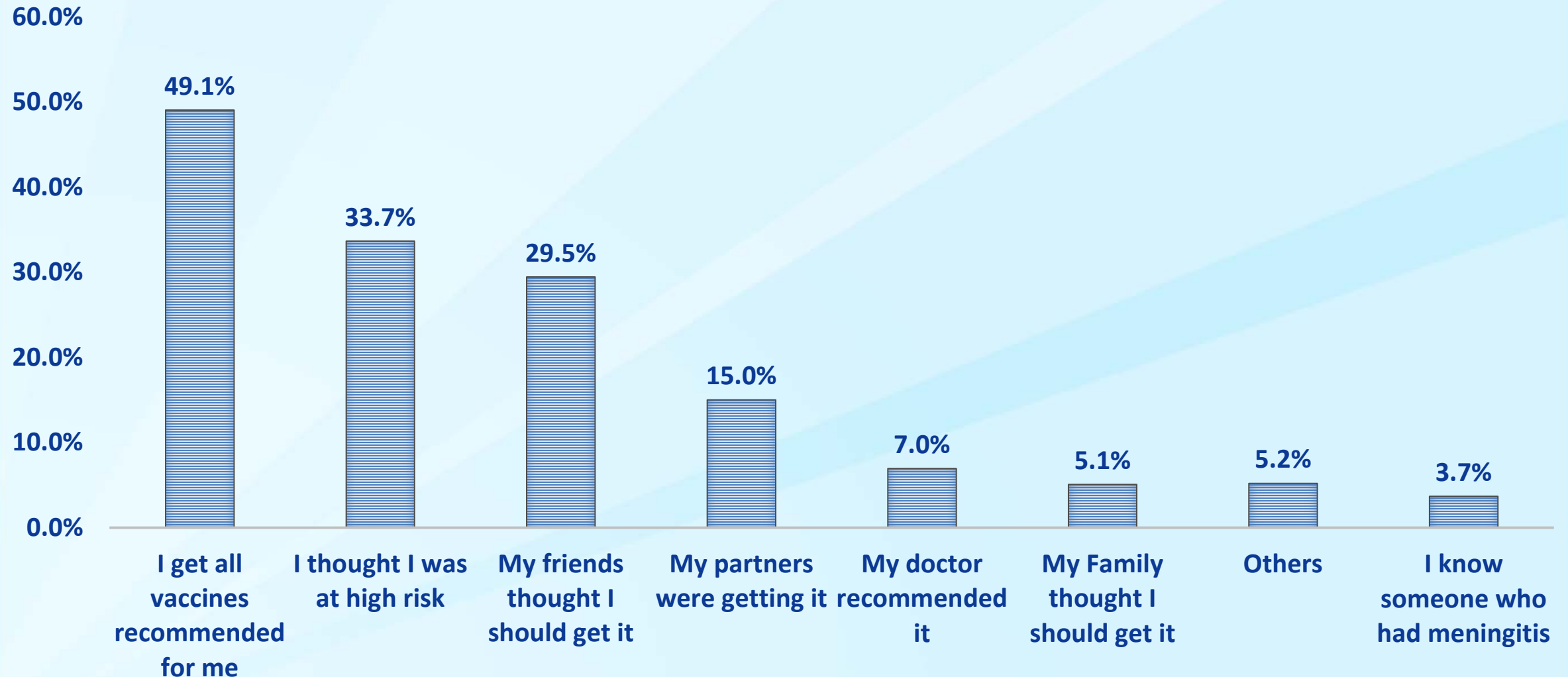
N = 960 - 1,081

# Sources of general information in the past week



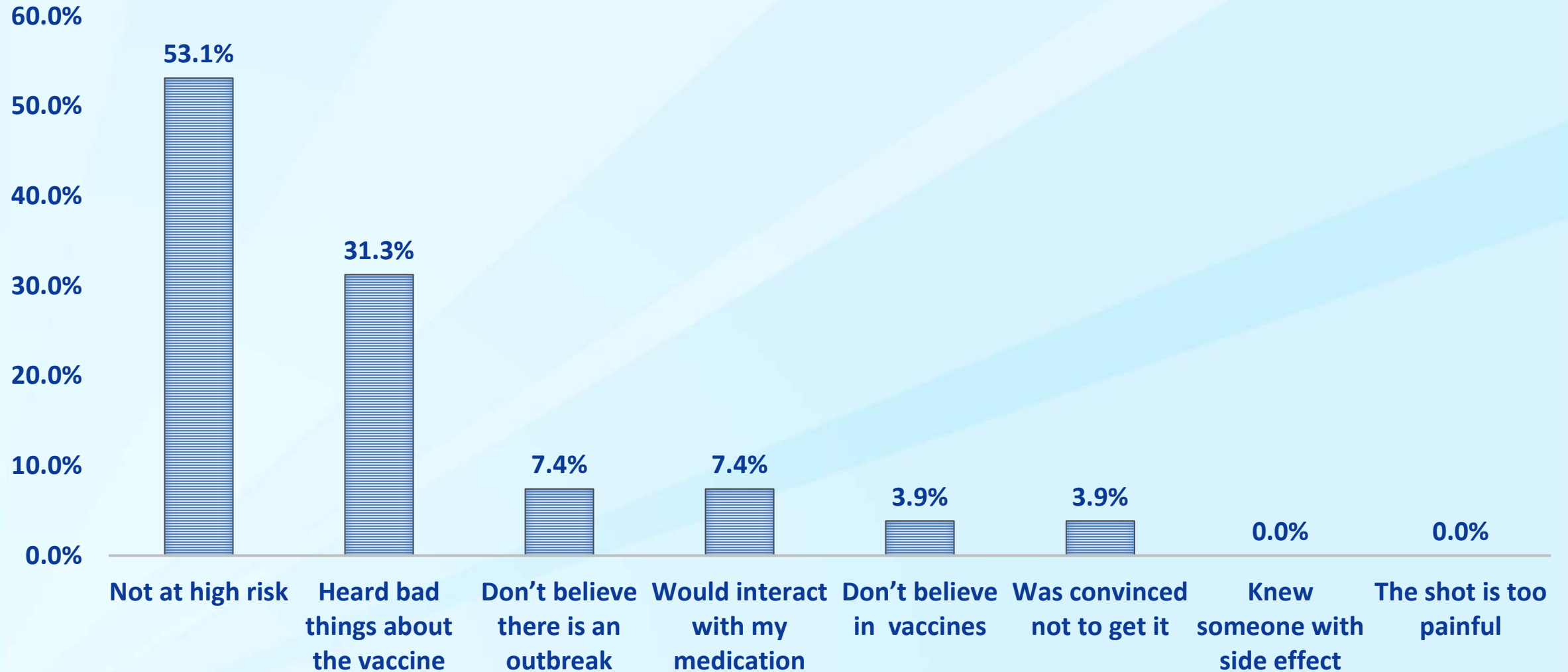
\* Statistically significant association between Race/Ethnicity and TV, Facebook, Twitter, Health Provider Email.

## Factors influencing decision to take vaccine



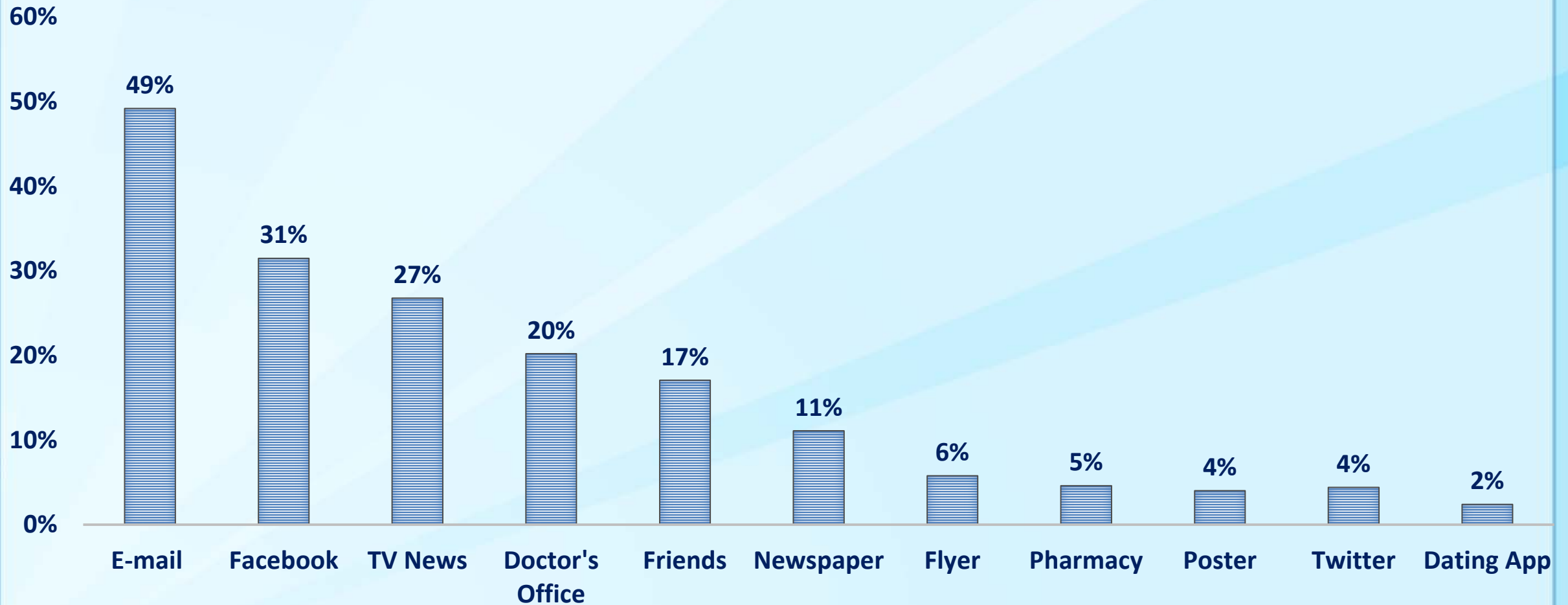
**N=1,005**

## Factors influencing decision not to take vaccine



N=27

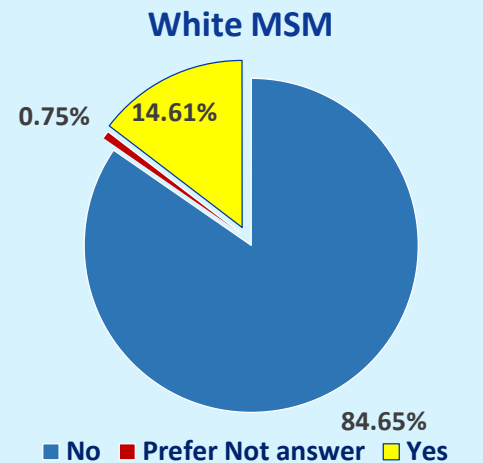
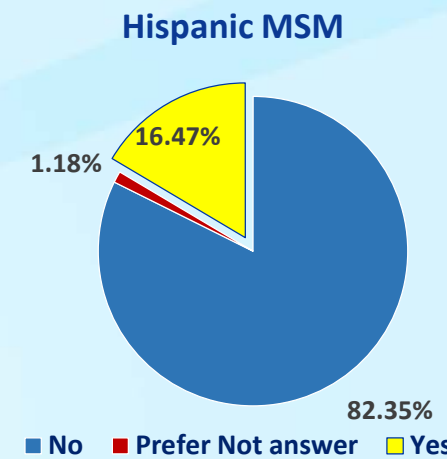
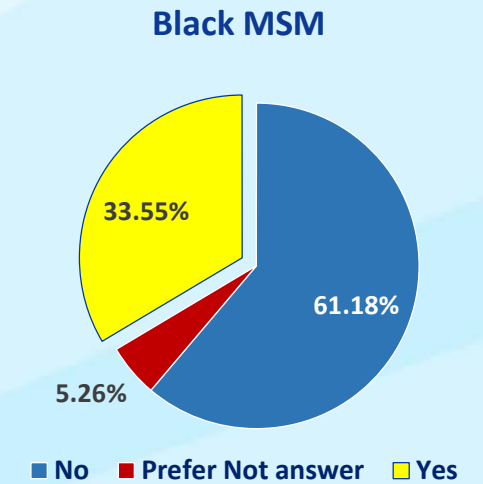
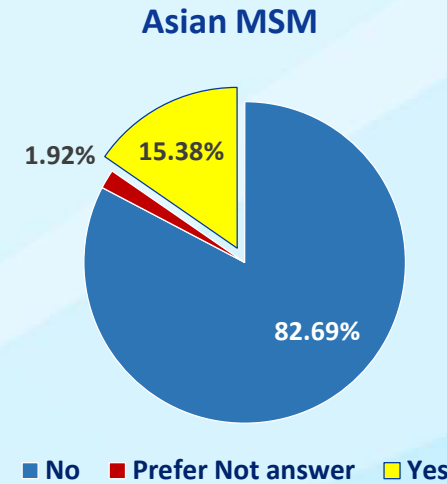
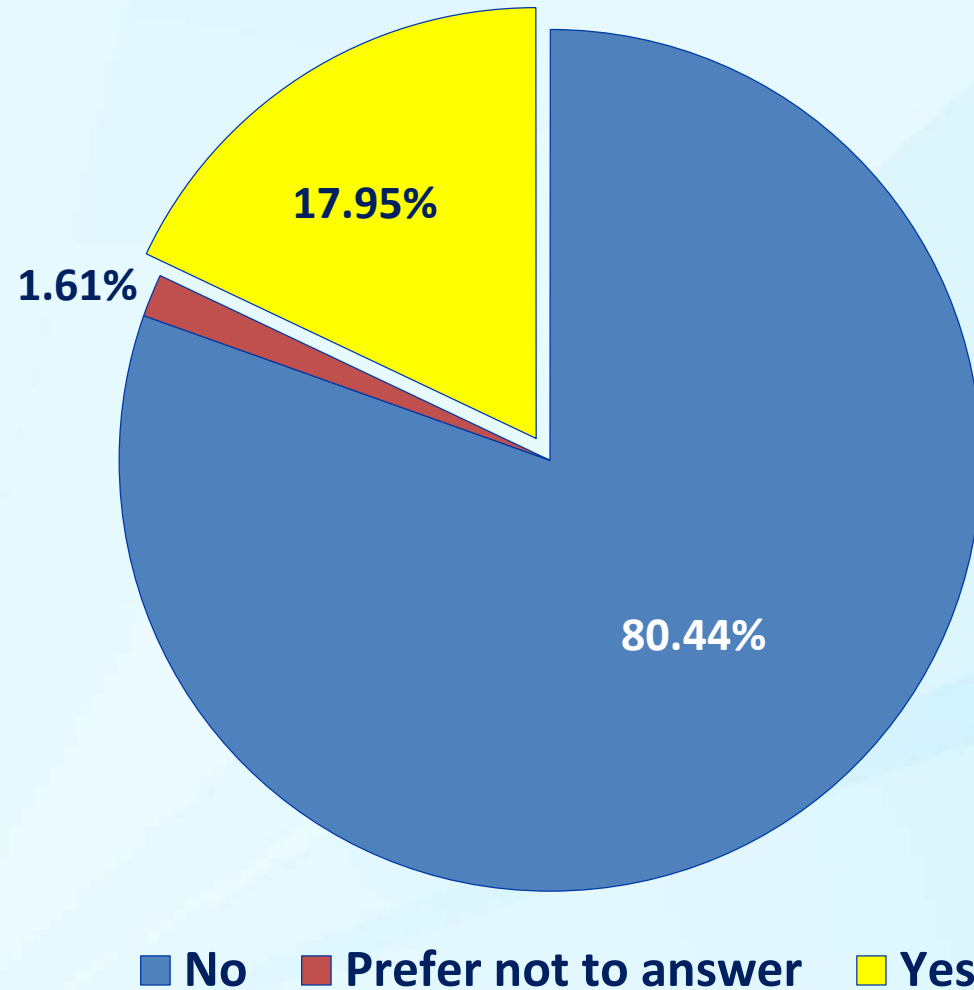
## Preferred Method of Learning about Future Campaign



**N=1,020**

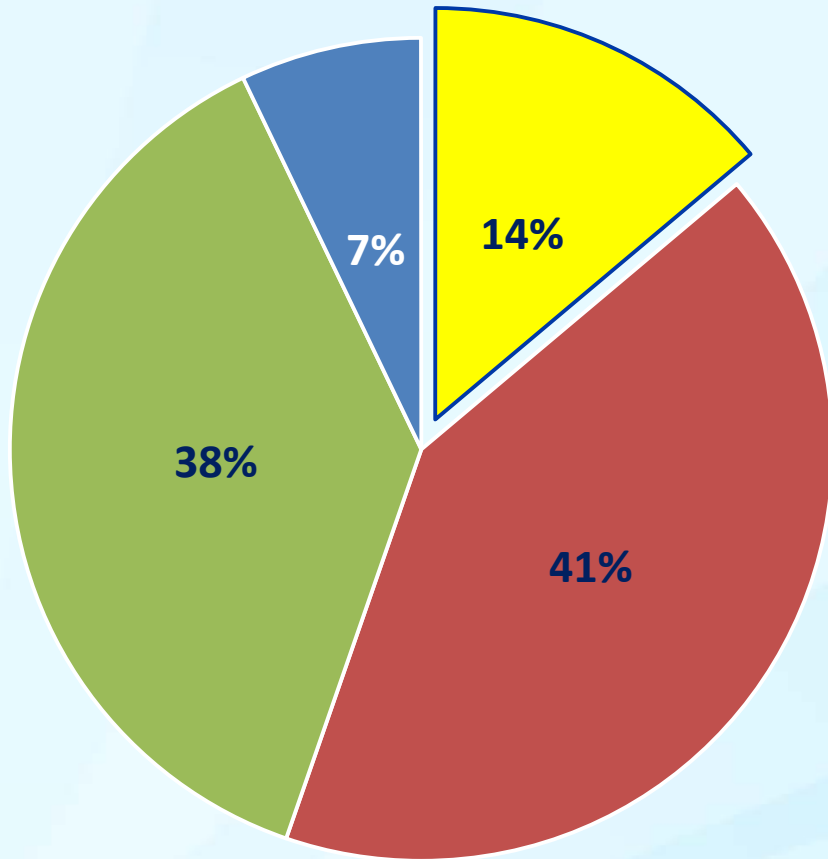
# **Risk of Invasive Meningococcal Disease**

# HIV Status Prevalence (Self reported)



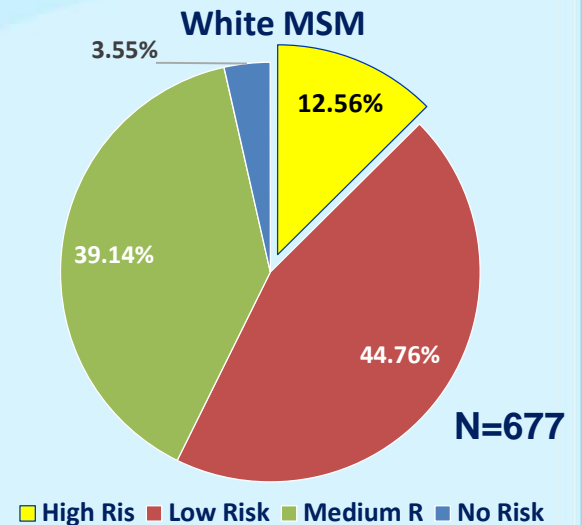
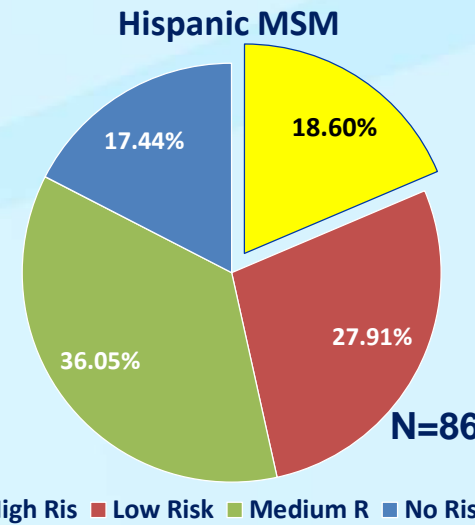
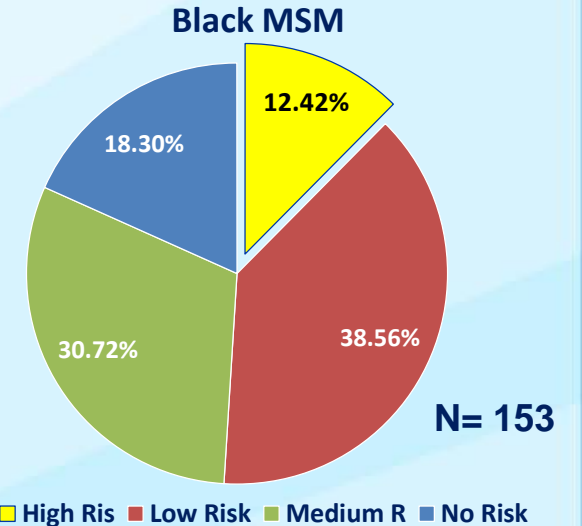
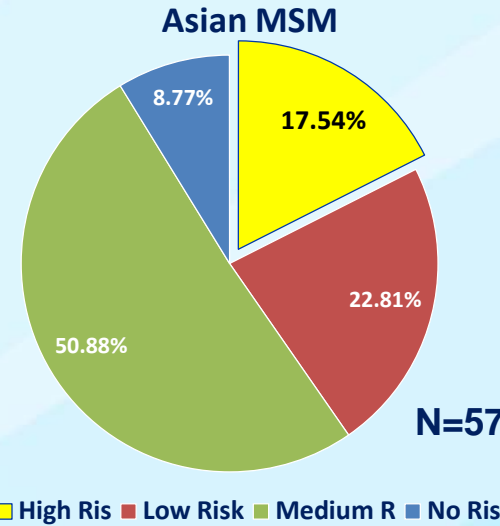


# Self-perceived of Risk of Meningococcal Disease



Risk Scale	
0	No risk
1-3	Low Risk
4-6	Medium Risk
7-10	High Risk

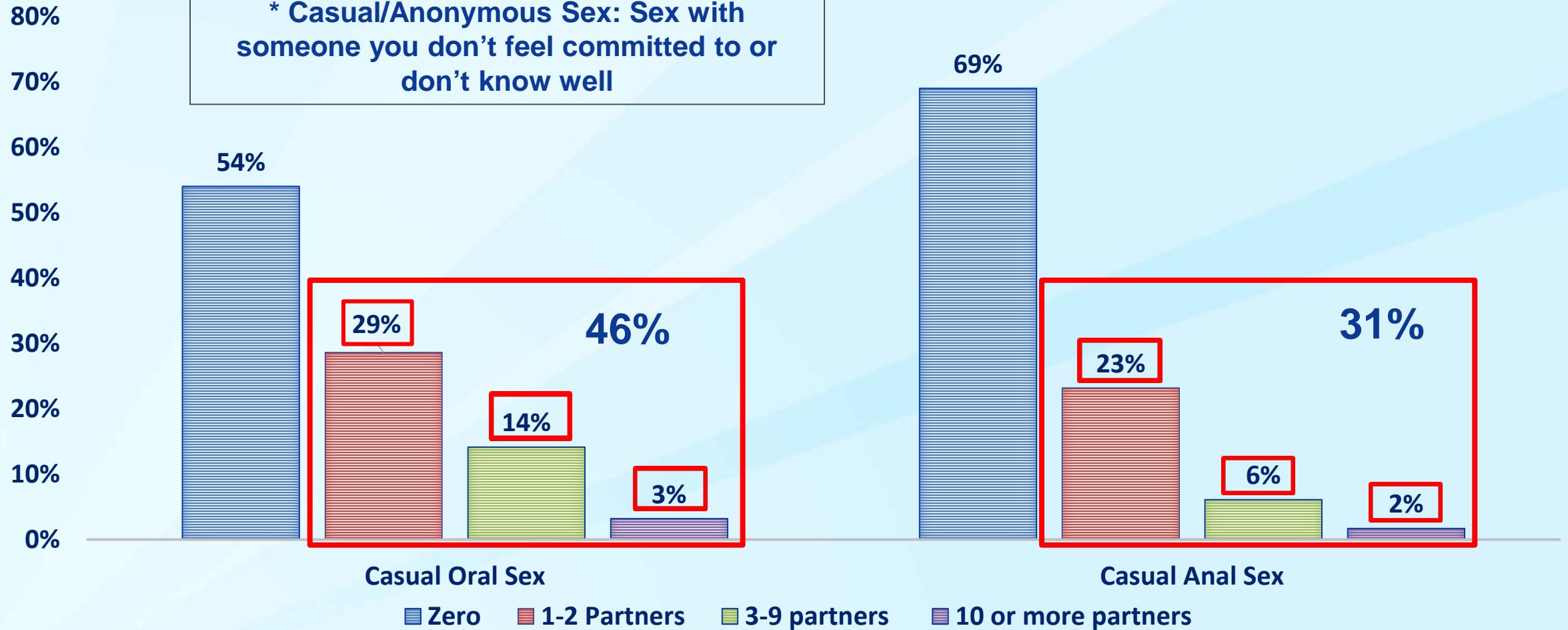
■ High Risk 
 ■ Low Risk 
 ■ Medium Risk 
 ■ No Risk



P<.0001

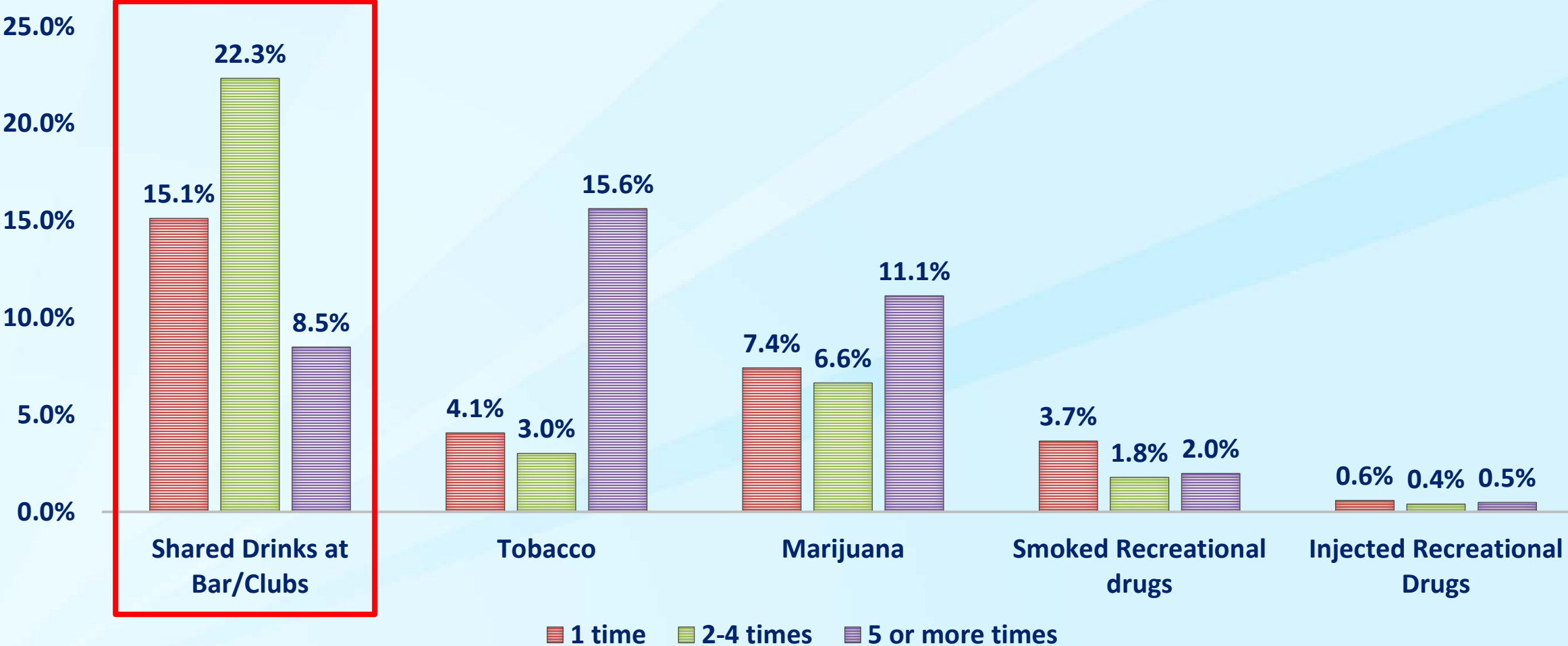
# Risk Factor Prevalence: Oral/ Anal Sex in the past 30 days

\* Casual/Anonymous Sex: Sex with someone you don't feel committed to or don't know well

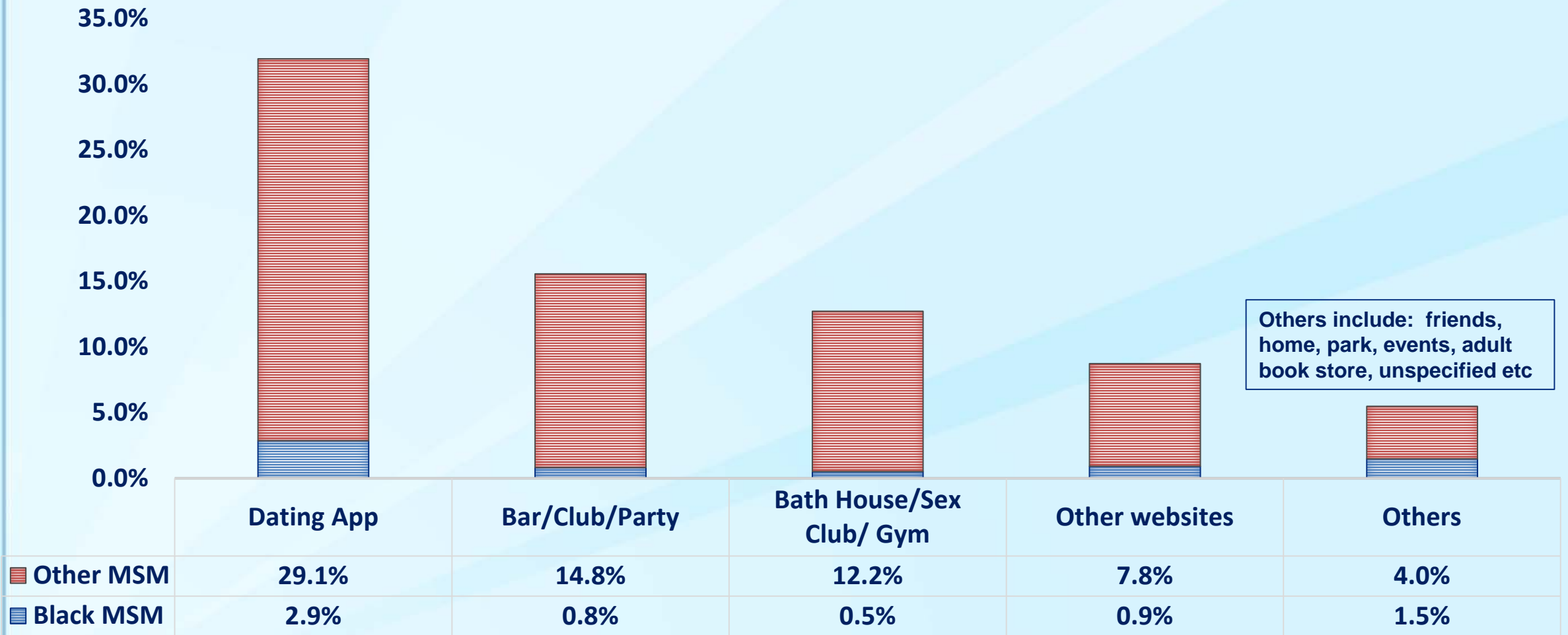


N = 949 - 1,023

# Risk Factor Prevalence among Respondents (in the past 30 days)

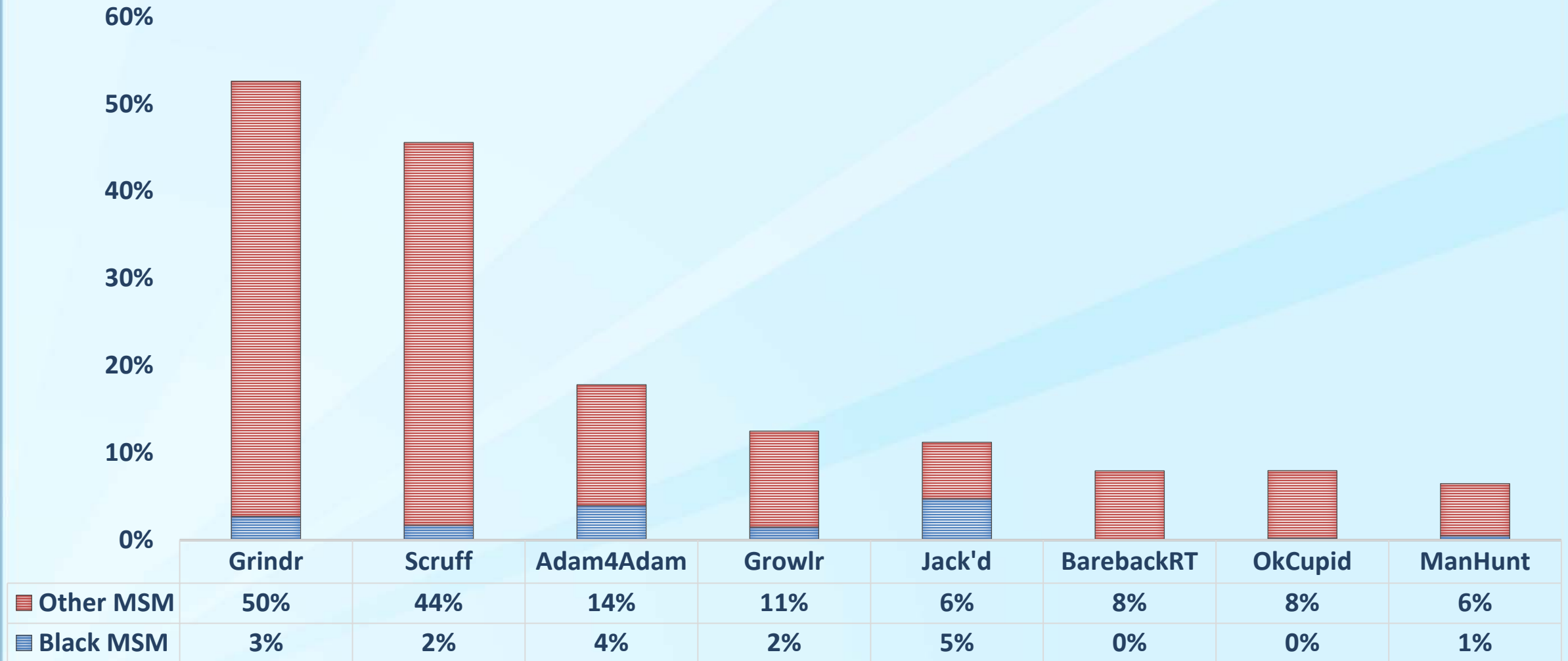


# Venues where respondents solicit partners in the past 30 days (by Race)



**N = 985    P<0.005**

## Commonly used Dating App/Website



N=399

## Summary 1

- **Mean age was 42.9 years – comparable to mean age of cases 38.1 years**
- **Racial distribution of respondents similar to racial distribution of MSM in Illinois**
  - Not comparable to racial distribution of outbreak cases - 85% are AA MSM
- **Majority of respondents have at least a college education**
- **Respondents are more aware of the outbreak than the campaign**
  - AA MSM and Age group 18-24 years were the least aware of the outbreak.
- **Most common sources of information about the outbreak were TV news, Friends and Facebook**
  - Predominant source of information about the outbreak for AA MSM is TV news
- **Commonly accessed general sources of information were Chicago local TV news, Online News and Facebook**
- **Preferred method of learning about future campaigns were E-mail, Facebook, TV news and Doctor's Office**

## Summary 2

- **HIV prevalence comparable to existing HIV prevalence data within the MSM population**
- **Only 14% of respondents considered themselves as having high risk of getting meningococcal disease infection**
- **46% and 31% of respondents had casual oral sex and anal sex with least one partner respectively in the past 30 days before the survey**
- **45.9% of respondents shared at least a drink at a bar/club in the past 30 days before the survey**
  - Other risk factors are apparently low
- **Dating app is the most commonly use platform for soliciting partners**
  - Grindr and Scruff are the commonly used Apps
  - Jack'd is most popular app among MSM

## Recommendations

- **More efforts needed to increase awareness within AA MSM population.**
- **Targeted campaigns for age group 18-24 years.**
  - Tend to practice more high risk behaviors
- **Preferred method of learning about future campaigns were E-mail, Facebook, TV news and Doctor's Office**
  - Communications through healthcare provider should be intensified
  - CBOs should intensify campaigns through their Facebook group and Email Listserve
- **Low risk perception within the community**
  - Effective risk communication through all campaign platforms identified above



# Acknowledgement

## CDC

- Manisha Patel
- Stacey Martin
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- Kevin Hansen
- Whitney Clegg
- Robynn Leidig
- Andrew Beron
- Julia Latash
- CDPH Immunization Staff
- CDPH Communicable Disease Staff

## COMMUNITY PARTNERS

- Howard Brown Health Center
- CORE center
- Southside Help Center
- Center on Halstead
- Northwestern Lakeview Clinic
- Komed Health Center
- COIP-University of Chicago
- And many others

**Thank you**