

# **HIV/STD Prevalence and Associated Risk Behaviors Among Young Men Who Have Sex With Men**

## **Implications for Prevention**

**Young Men's Survey Study Group, Prevention Services  
Research Branch, DHAP, CDC**

# Presentation Objectives

Among young MSM,

1. Describe the prevalence of HIV/HBV and associated risk behaviors
2. Discuss key implications for prevention

# YMS Method

Venue-based survey of young MSM, conducted in two phases:

Phase I: ages 15-22, 7 cities, 1994-1998

Phase II: ages 23-29, 6 cities, 1998-2000

Constructed monthly sampling frames of MSM-identified venues and day-time periods

Randomly selected venues and time periods

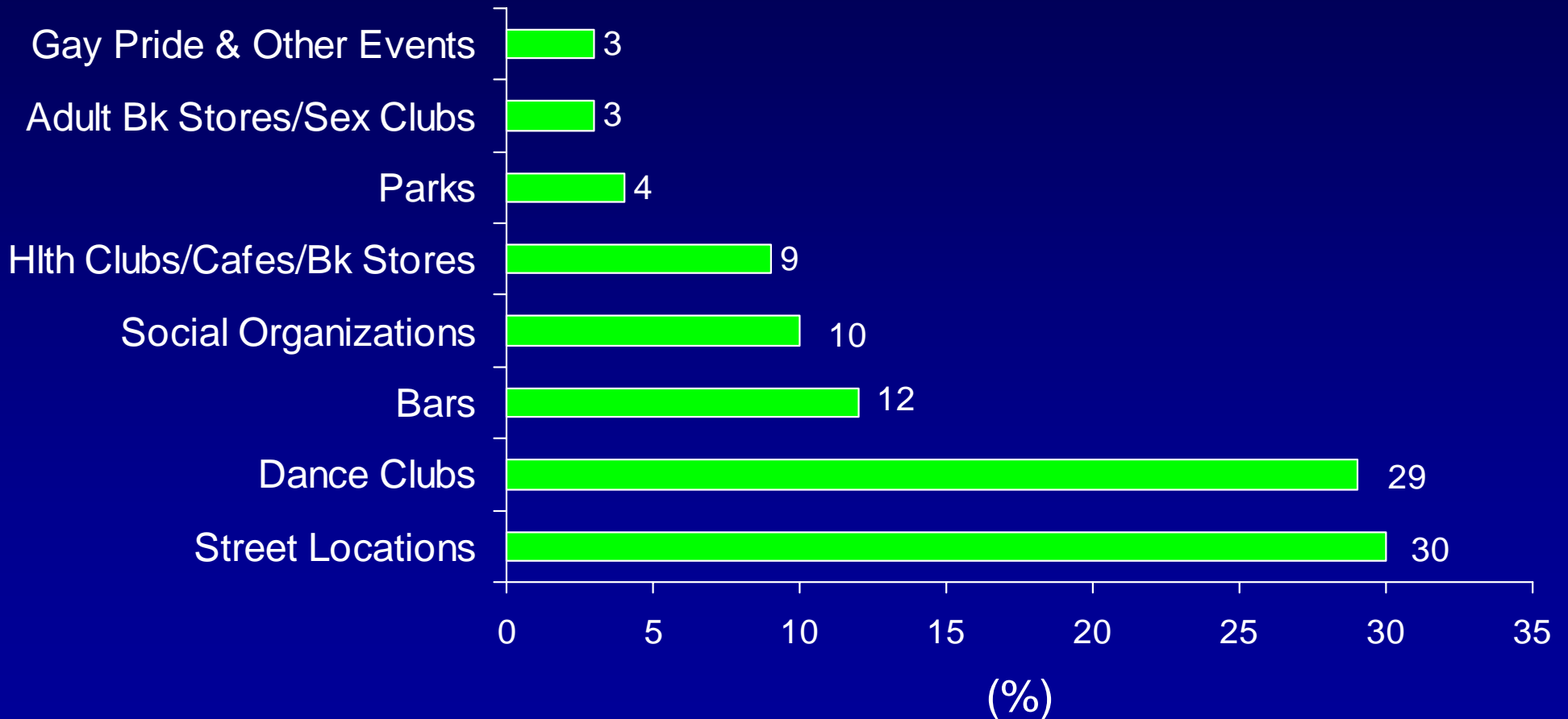
Systematically approached young men and assessed eligibility

Interviewed, counseled, and tested participants in a nearby van

# YMS Phase I Sampling Outcomes

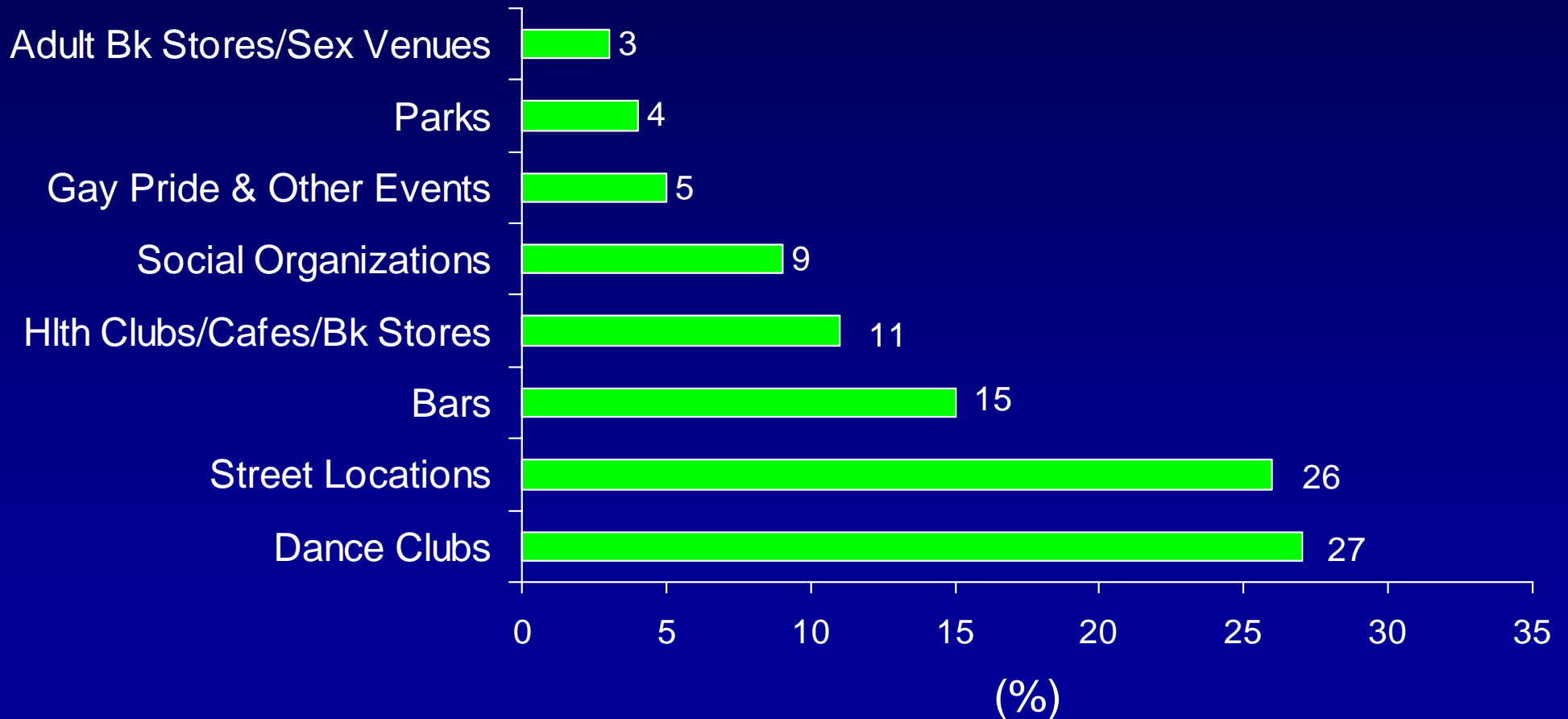
Metropolitan Areas	7
Venues	194
Sampling Events	1,592
Eligible	6,866
Enrolled	4,274 (62%)
MSM Enrolled	3,492

# Participant Characteristics Recruitment Venue



YMS Phase I: n=3492 MSM aged 15-22 years, 7 U.S. metro areas, 1994-1998

# Participant Characteristics Recruitment Venue



YMS Phases I and II: n=7413 eligible participants, 7 U.S. metro areas, 1994-2000

# Participant Characteristics

## Demographics

### Age Group

15-18	29%
19-22	71%

# Participant Characteristics

## Demographics

### Race/Ethnicity

Asian	6%
Black	17%
Hispanic	30%
Native American	1%
White	36%
Mixed/Other	10%

# HIV/STD Prevalence (YMS Phase I)

## Infection

HIV	7%
HBV	11%
Syphilis	1%

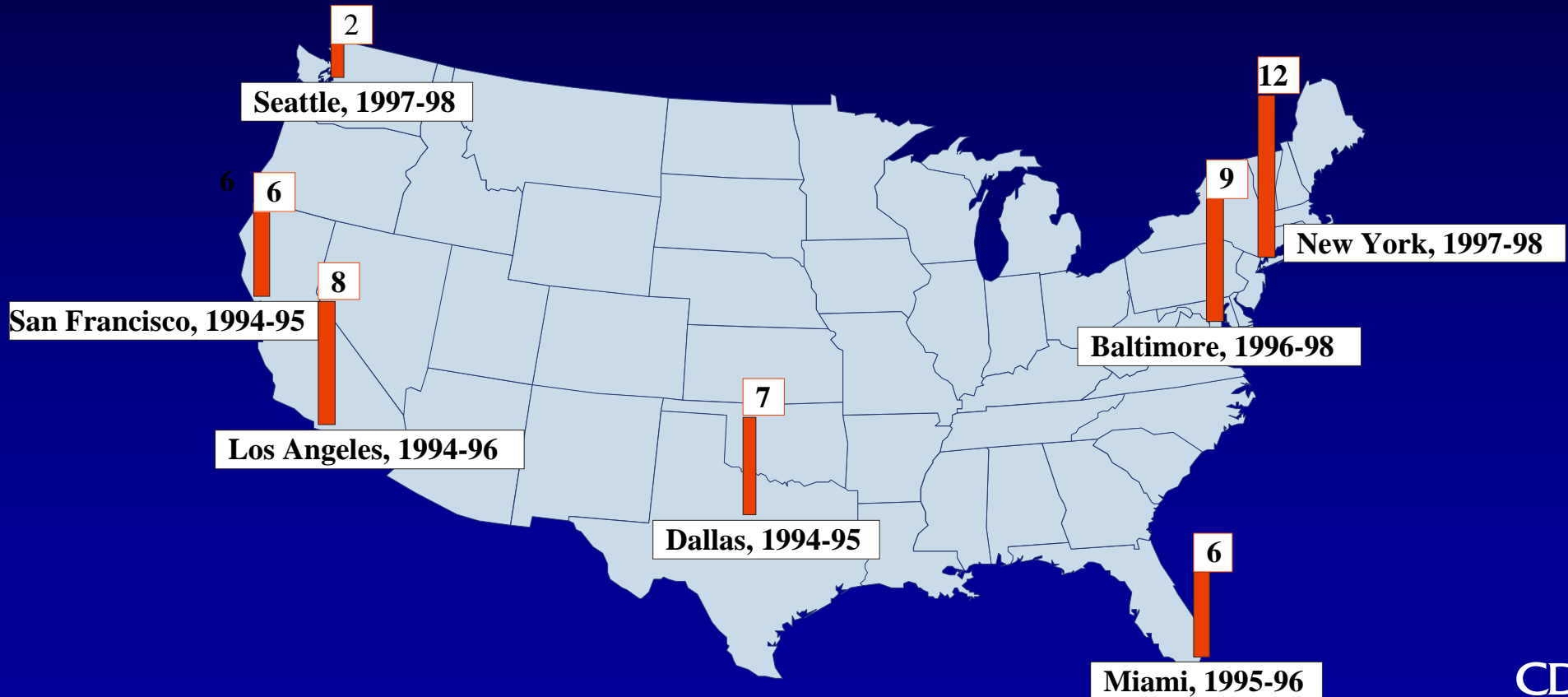
YMS Phase I: n=3492 MSM aged 15-22 years, 7 U.S. metro areas, 1994-1998

# HIV Prevalence, by Metro Area

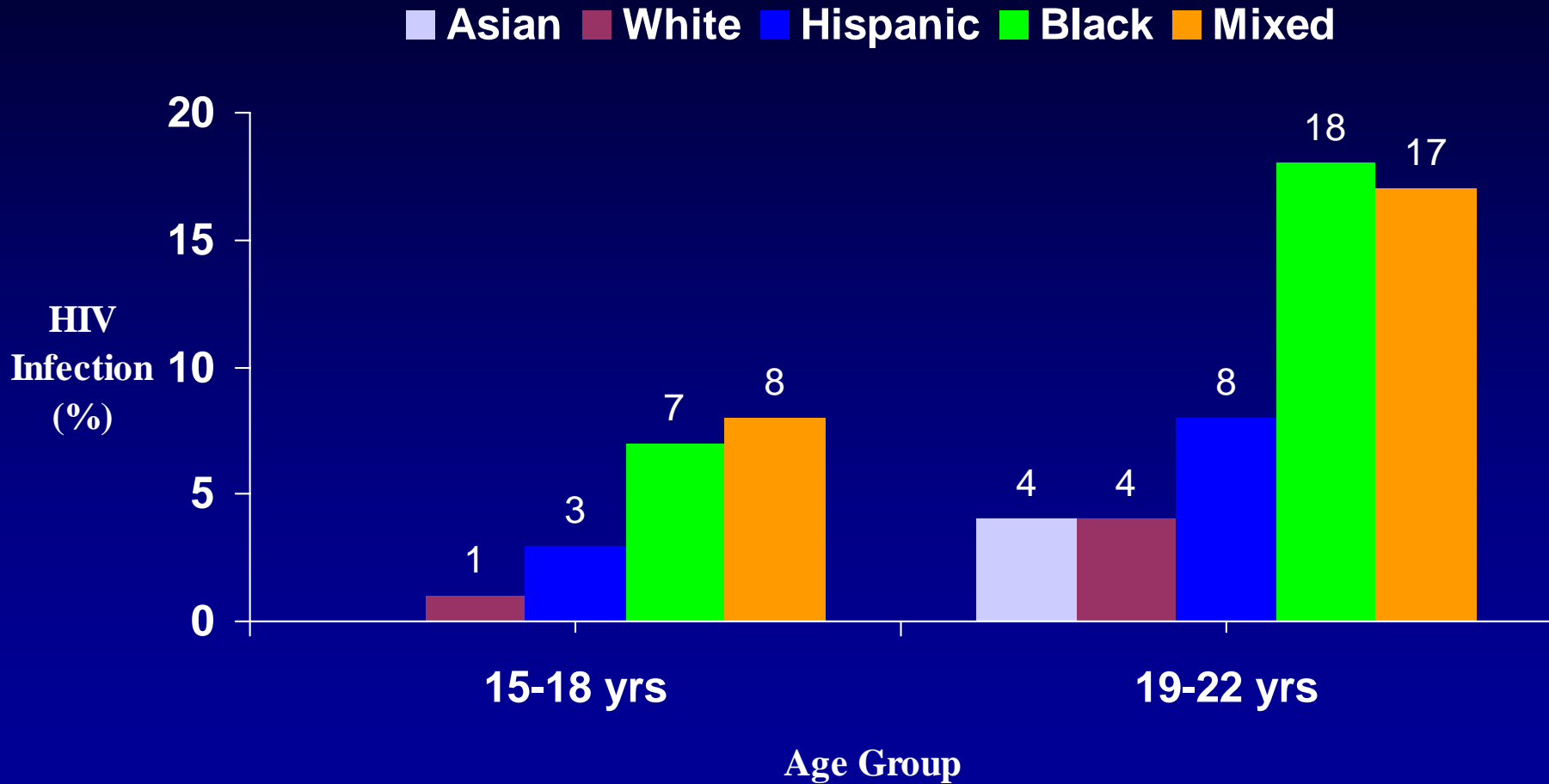
## (YMS Phase I)

■ Hepatitis B Immunization Coverage (%)  
■ HBV Infection (%)

■ HIV Infection (%)



# HIV Infection by Age Group and Race (YMS Phase I)



YMS Phase I: n=3449 MSM aged 15-22 years, 7 U.S. metro areas, 1994-1998

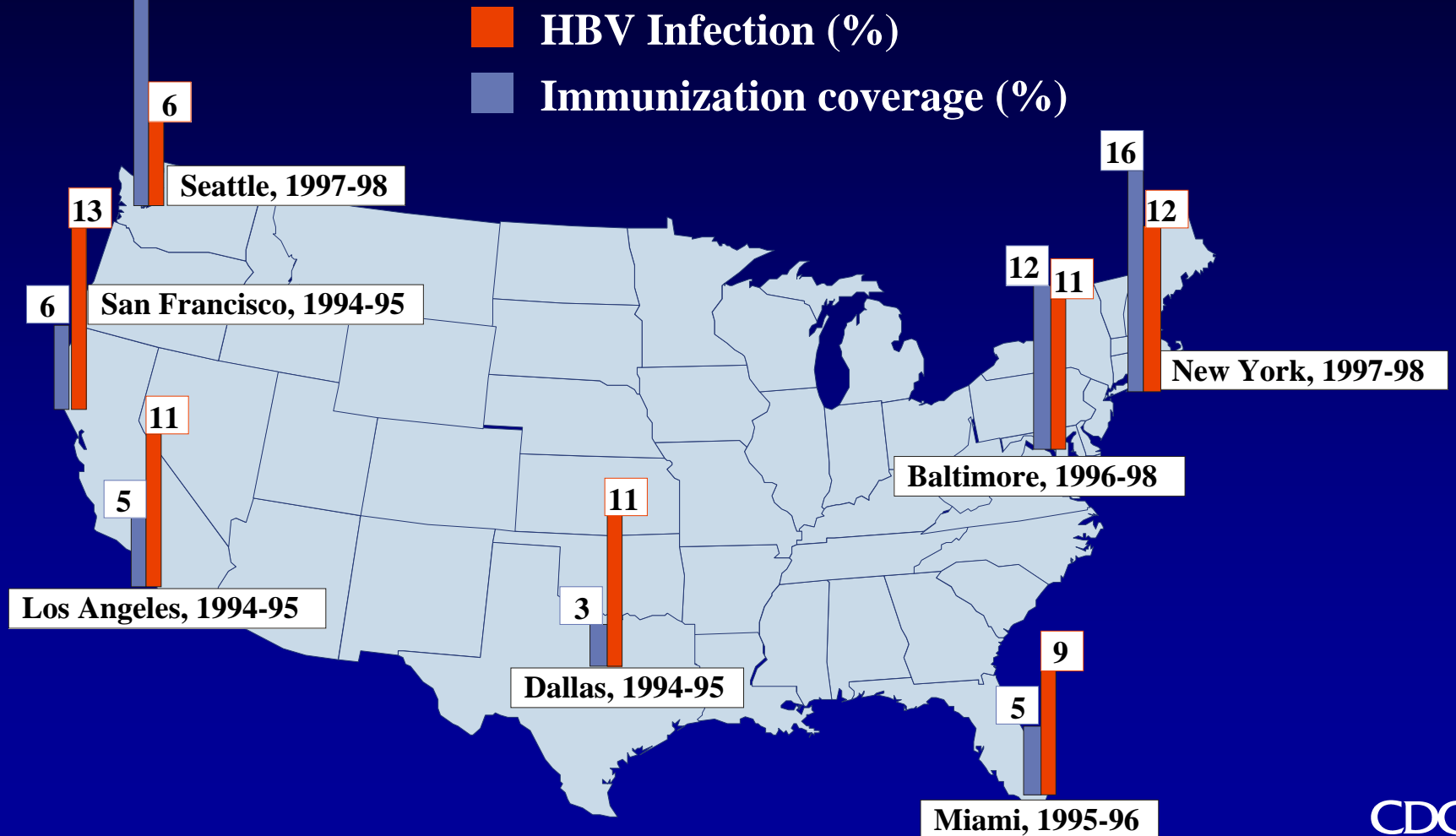
# HIV/STD Prevalence (YMS Phase I)

## Infection

HIV	7%
<b>HBV</b>	<b>11%</b>
Syphilis	1%

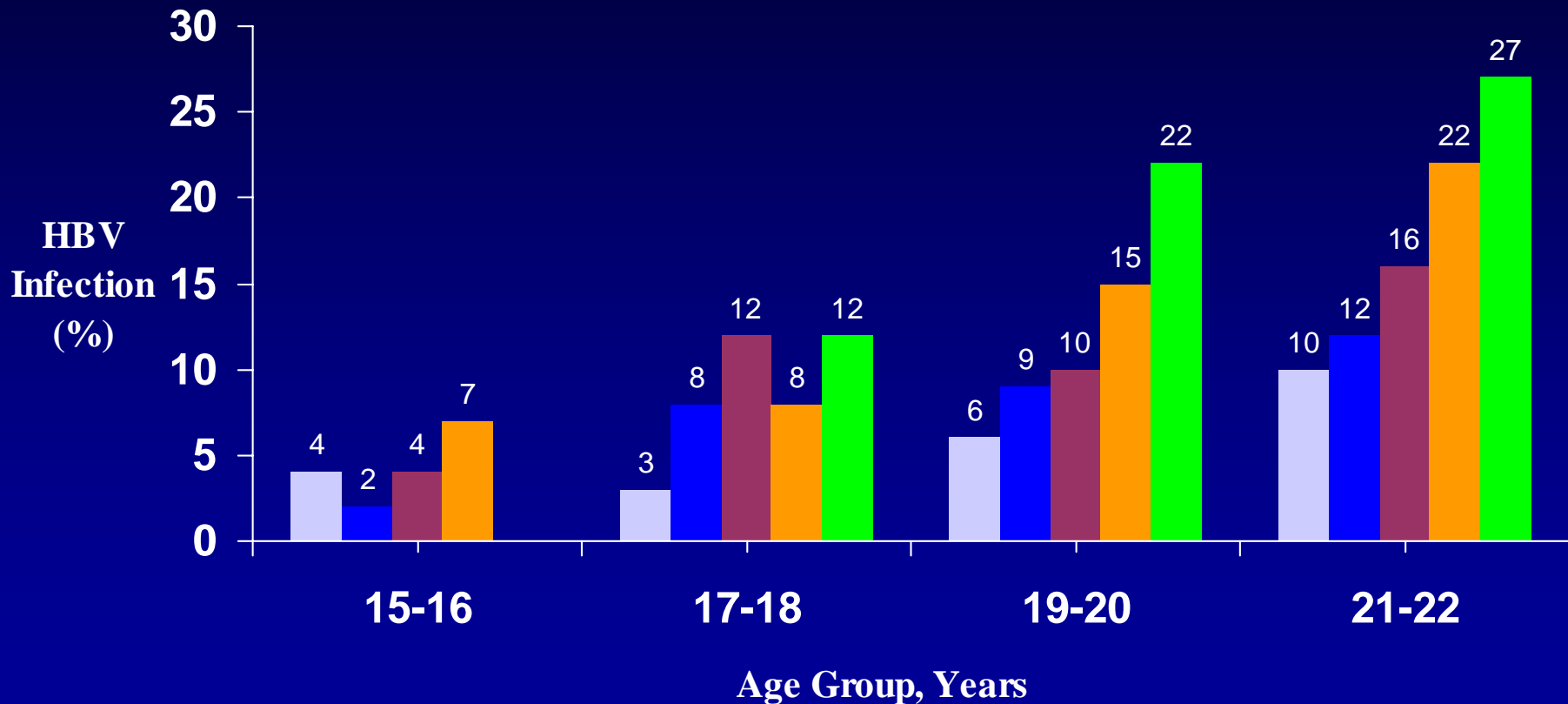
YMS Phase I: n=3492 MSM aged 15-22 years, 7 U.S. metro areas, 1994-1998

# HBV Infection and Immunization Coverage, by Site (YMS Phase I)



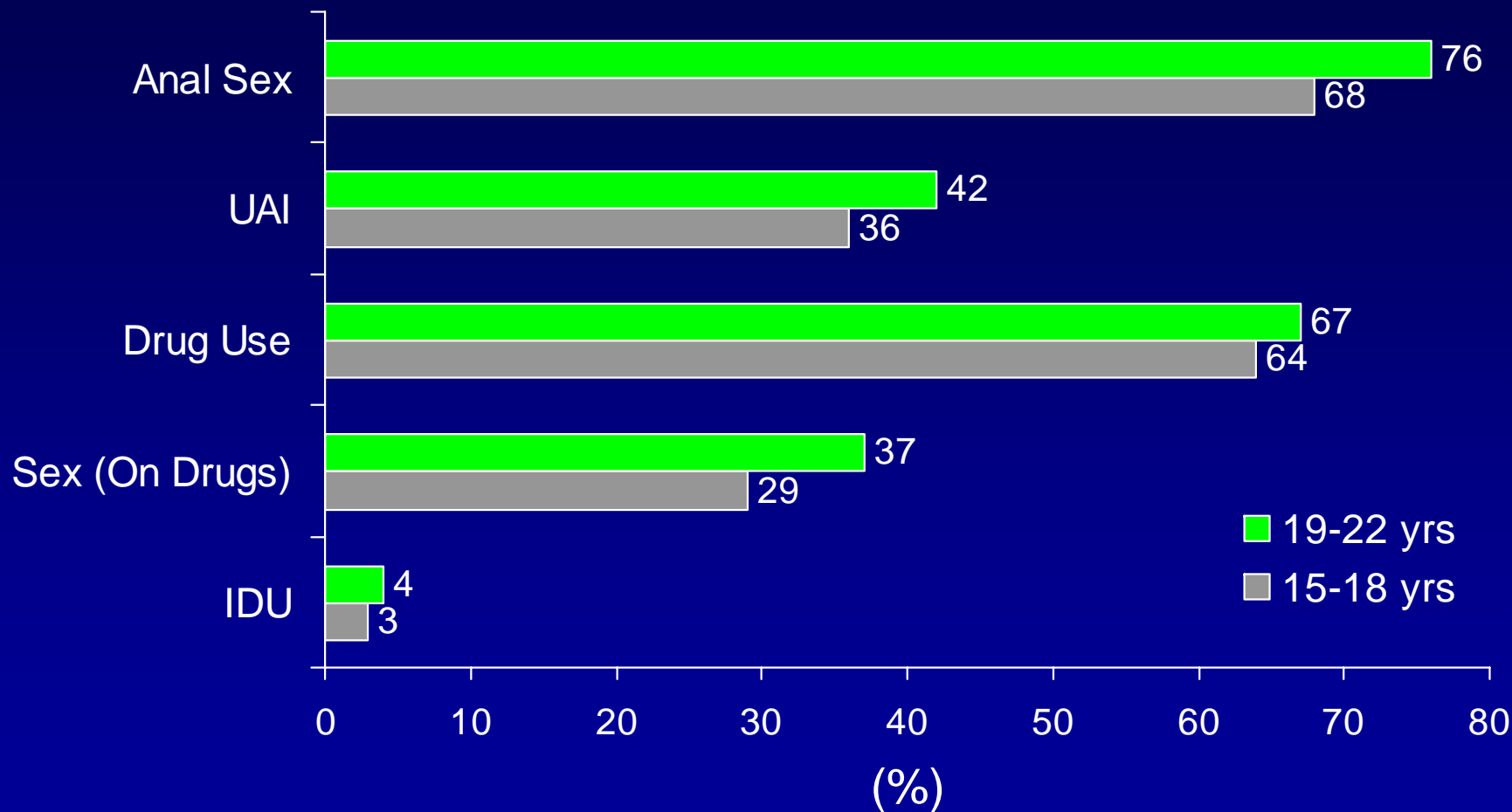
# HBV Infection by Age Group and Race (YMS Phase I)

White Hispanic Mixed Black Asian



YMS Phase I: n=3432 MSM aged 15-22 years, 7 U.S. metro areas, 1994-1998

# Sexual and Drug Use Behaviors in Six Month Interview Period



YMS Phase I: n=3492 MSM aged 15-22 years, 7 U.S. metro areas, 1994-1998

# Preliminary YMS Phase II Outcomes

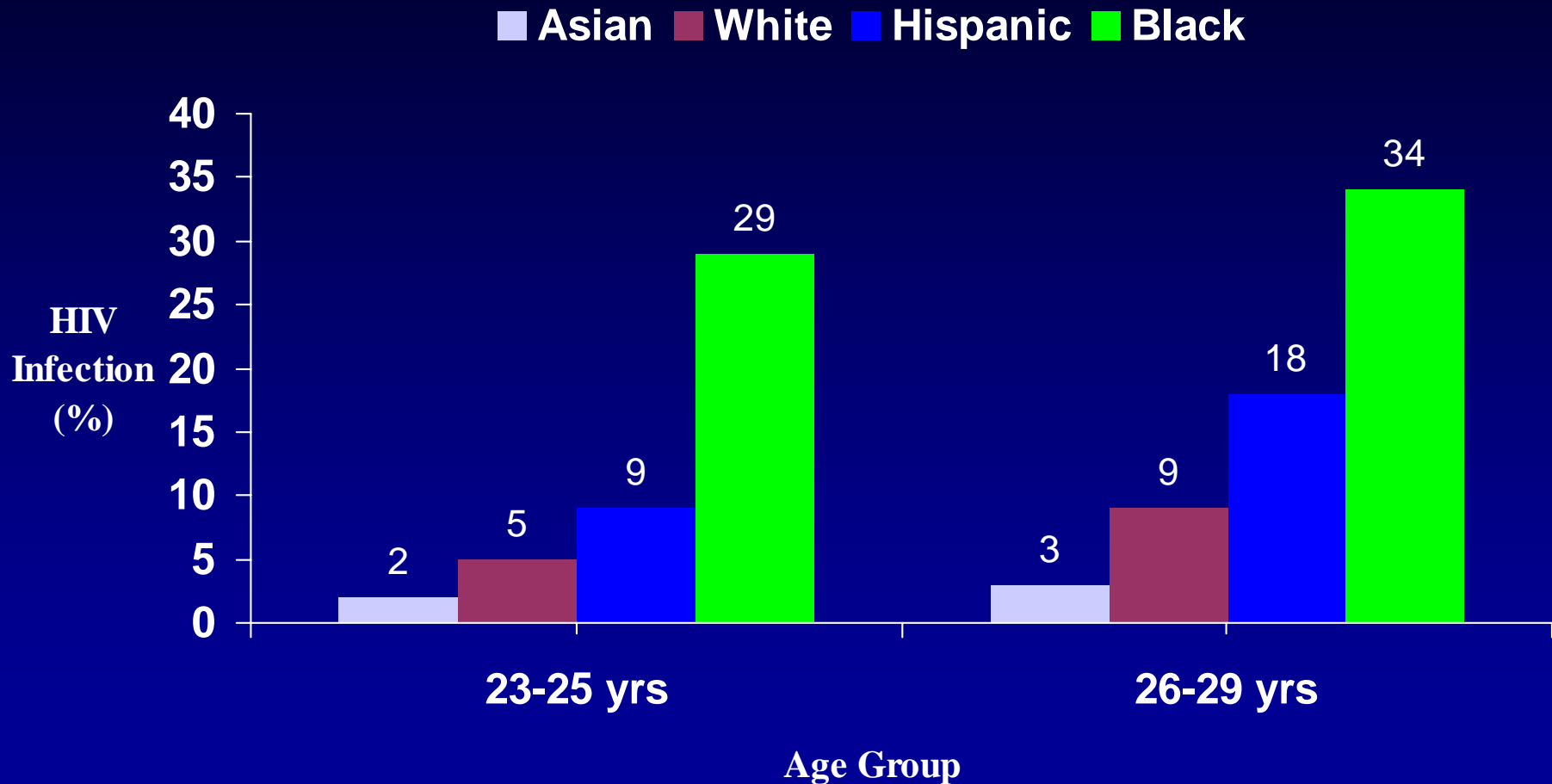
## Recruitment

Metropolitan areas (1998-2000)	6
MSM aged 23-29 years	2,908

## Infection

HIV	13%
HBV	21%

# HIV Infection by Age Group and Race (Preliminary Phase II Outcomes)



YMS Phase II: n=2908 MSM aged 23-29 years, 6 U.S. metro areas, 1998-2000

# Prevention Implications Discussion Points

# Prevention Implications

1. *When should young MSM first test for HIV and how frequently should they test?*

Phase I: 35% had never tested; 39% 1-2 times; 26%  $\geq 3$  times

*Consequence: High Prevalence of Unrecognized Infection*

Phase I: 203 (82%) of 249 positive men were unaware of their HIV infection.

*Consequence: Young MSM with unrecognized infection may unknowingly transmit HIV*

Phase I: 52% of infected unaware engaged in UAI vs. 29% of infected aware.

# Prevention Implications (Cont.)

## 2. *What are important barriers to testing?*

Phase I: Of 1,222 who had not tested: 44% low risk for infection; 38% scared of results; and 18% didn't like needles

Phase I: Of the 541 who had not tested because of low perceived risk: 50% had > 3 male partners, 70% ever had anal sex, and 3% were HIV infected.

## Prevention Implications (Cont.)

### 3. *Is it lack of access to health-care and prevention services, poor quality of services, or both?*

Phase I: Of the 1,222 who had not tested, 89% reported having a regular source of health care.

Phase I: Of over 2,600 who were susceptible to HBV infection, 96% reported using a regular source of health care or accessing HIV/STD testing services.

Phase I: Compared with first-time testers, repeat testers were more likely to acquire HIV (7% vs. 4%), and to report recent UAI (45% vs. 34%) and drug use prior to sex (41% vs. 28%).

# Conclusions

Many young MSM acquire HIV and HBV infection, particularly young minority MSM.

Despite the availability of a safe and effective vaccine for nearly two decades, few young MSM are adequately vaccinated against hepatitis B in the U.S.

Health care and HIV/STD prevention providers have opportunities to intervene on HIV related risks and to vaccinate young MSM against hepatitis B.

# Limitations

YMS sample is not representative of all young MSM

1. Less than optimal enrollment rate
2. YMS conducted in only a few metropolitan areas
3. Sampled only young MSM who attend MSM-identified venues

# YMS Phase I Study Group

**Baltimore, MD:** John Hylton, David Celentano

**Dallas, TX:** Douglas Shehan, Anne Freeman, Santiago Pedraza, Eugene Thompson

**Los Angeles, CA:** Bobby Gatson, Sue Stoyanoff, Wes Ford, Peter Kerndt

**Miami, FL:** John Kiriakon, Al Bay, Marlene LaLota, Thomas Liberti

**New York City, NY:** Vincent Guilin, Beryl Koblin, Lucia Torian

**San Francisco, CA:** Melissa Jones, George Lemp, William McFarland, Mitchell Katz

**Seattle, WA:** Tomas Perdue, Hanne Thiede

# Measures

RSHC: Is there a particular doctor's office, HMO, hospital or some other place that you usually go if you are sick or need advice about your health?

# Limitations

Reported immunization coverage is a minimum estimate:

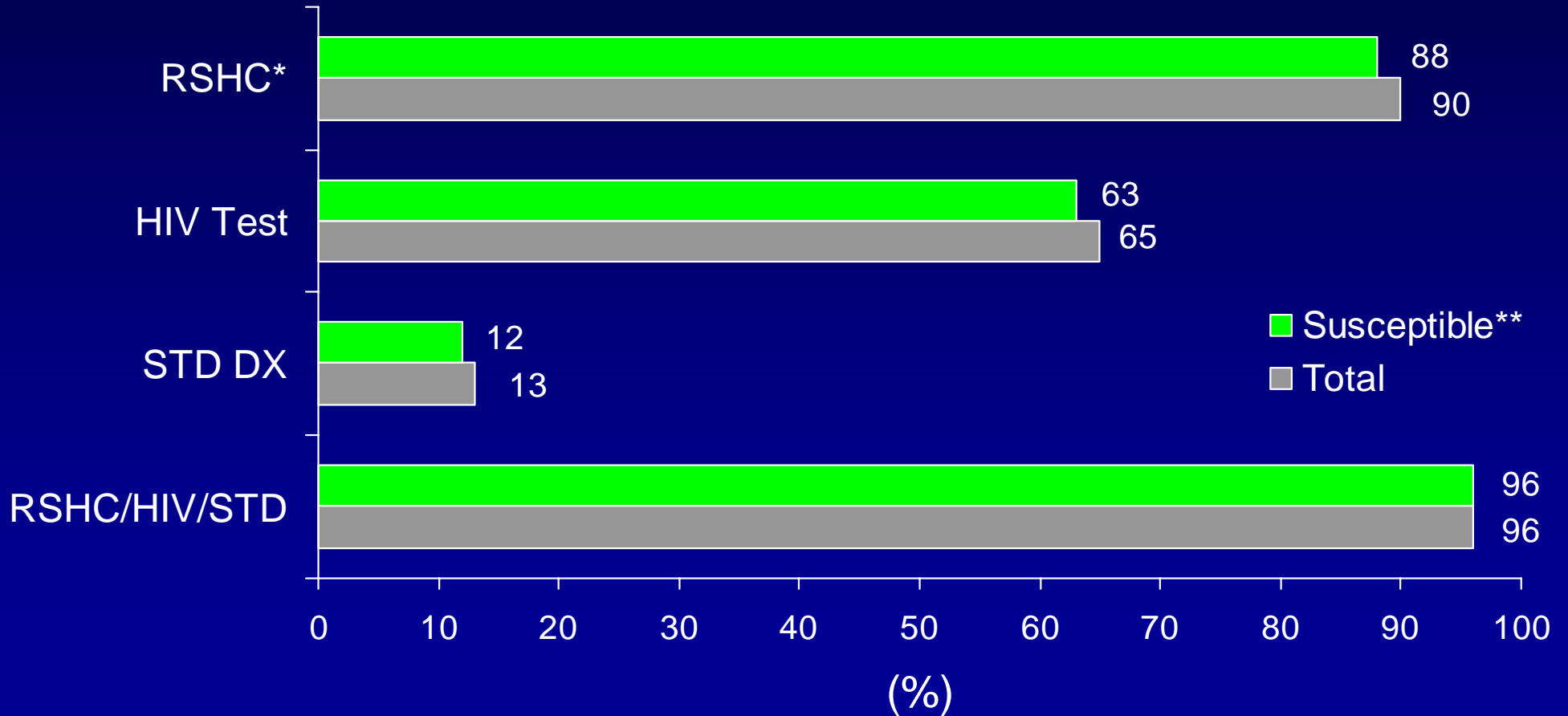
1. Presence of anti-HBs alone without a vaccination HX may represent vaccine-associated immunity

*Changing the case definition would increase coverage from 9% to 12% (PI) and from 13% to 17% (PII)*

2. Among those with a vaccination HX, vaccine-induced anti-HBs may have waned below detectable levels

*Changing the case definition would increase “coverage” from 12% to 19% (PI) and from 17% to 30% (PII)*

# Missed Opportunities for Hepatitis B Vaccination (YMS Phase I)



\* Regular source of health care

\*\* N=2639 MSM aged 15-22 years

# Preliminary YMS Phase II Outcomes

## Recruitment

Metropolitan areas (1998-2000)	6
MSM aged 23-29 years	2,838

## HBV

Immunized	13%
Infected	21%
Susceptible	62%
Unknown	4%

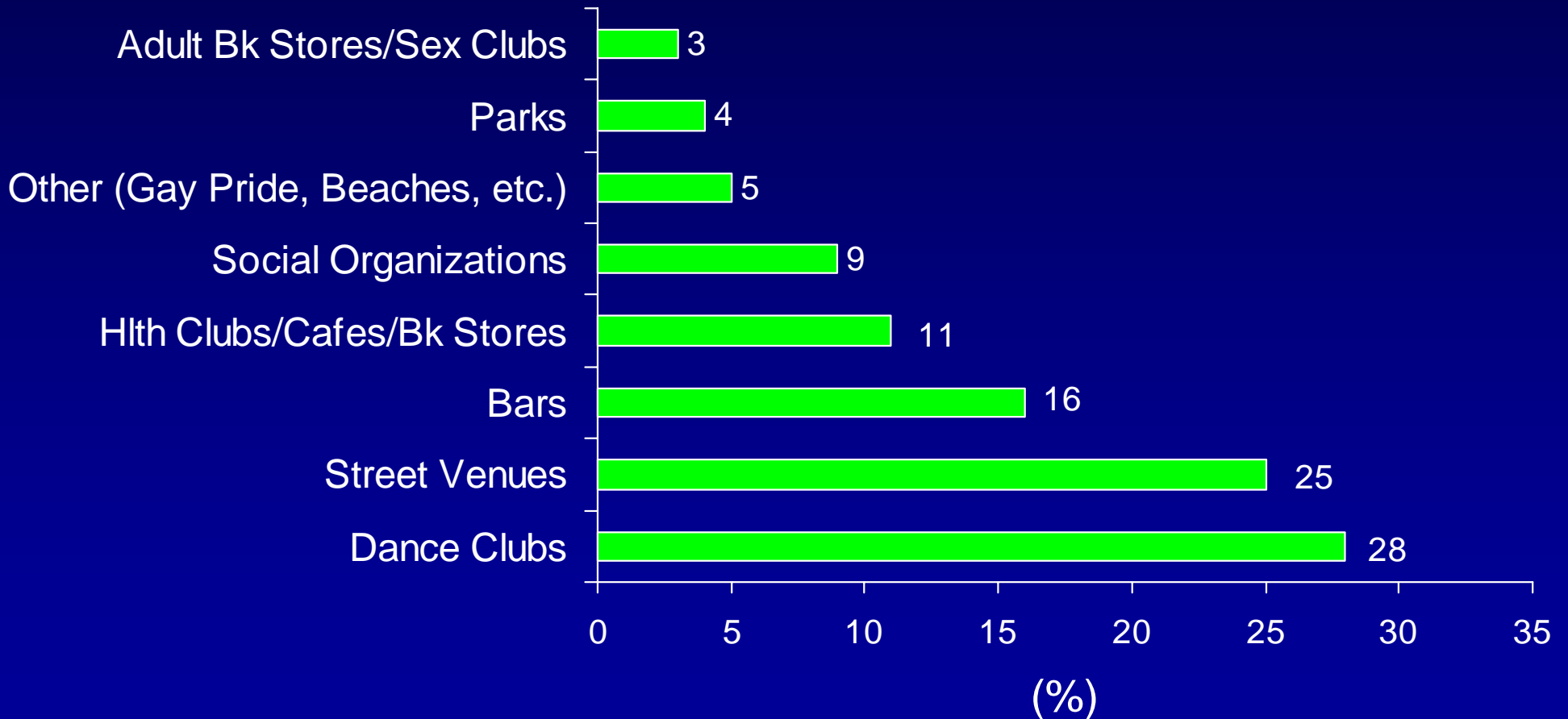
# Sampling Outcomes

Metropolitan Areas	7	
Venues	308	
Sampling Events	2,481	
Counted	65,238	
Approached	43,376	(66%)
Accepted approach	38,672	(89%)
Eligible	12,310	
Enrolled	7,422	(60%)
MSM enrolled	6,441	

# Sampling Outcomes

Metropolitan Areas	7	
Venues	308	
Eligible	12,310	
Enrolled	7,422	(60%)
MSM enrolled	6,441	(87%)

# Participant Characteristics Recruitment Venue



YMS Phases I & II: n=6441 MSM aged 15-29 years, 7 U.S. metro areas, 1994-2000