

***Moving the Needle:
The Health Needs of Injection Drug Users***

National Perspectives

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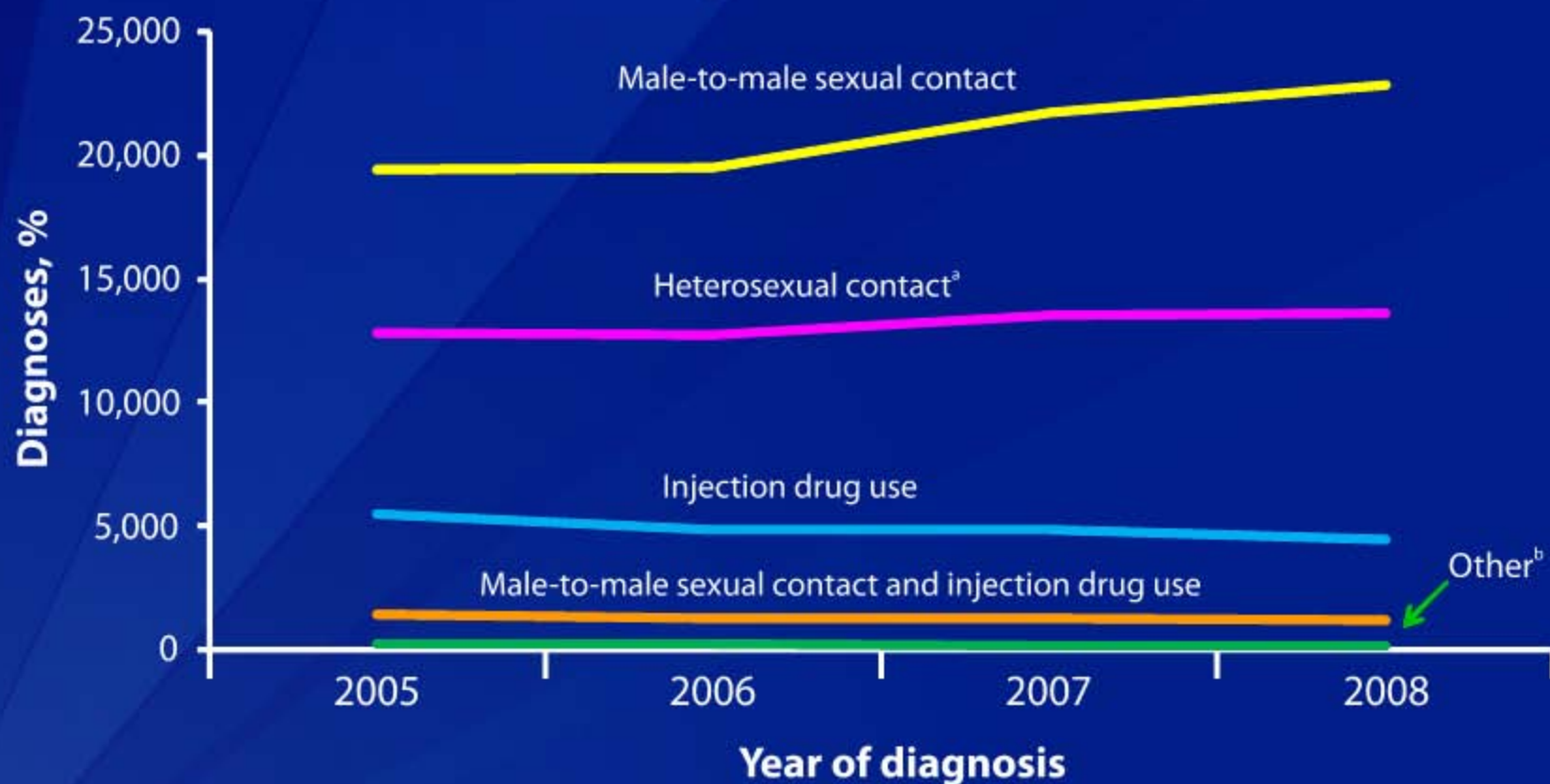
Presented at
NASTAD Annual Meeting
May 23, 2011



Overview

- ❑ HIV Surveillance
- ❑ Hepatitis C Surveillance
- ❑ Behavioral Surveillance
- ❑ CDC initiatives for IDU
- ❑ Syringe Exchange Programs

Diagnoses of HIV Infection among Adults and Adolescents, by Transmission Category, 2005–2008—37 States and 5 U.S. Dependent Areas



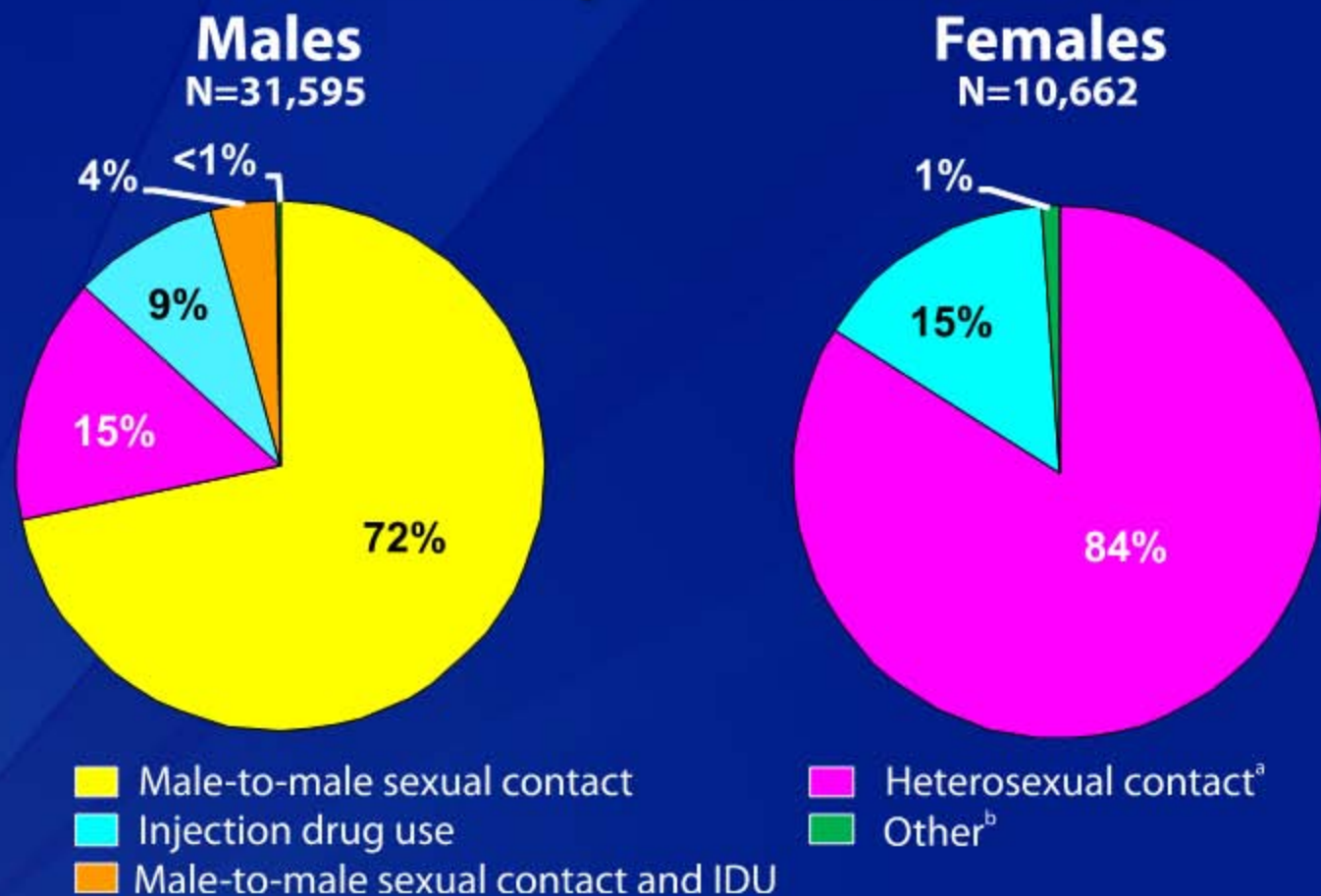
Note. Data include persons with a diagnosis of HIV infection regardless of stage of disease at diagnosis. All displayed data have been estimated. Estimated numbers resulted from statistical adjustment that accounted for reporting delays and missing risk-factor information, but not for incomplete reporting.

^a Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.

^b Includes hemophilia, blood transfusion, and risk factor not reported or not identified.



Diagnoses of HIV Infection among Adults and Adolescents, by Sex and Transmission Category, 2008 — 37 States and 5 U.S. Dependent Areas



Note. Data include persons with a diagnosis of HIV infection regardless of stage of disease at diagnosis.

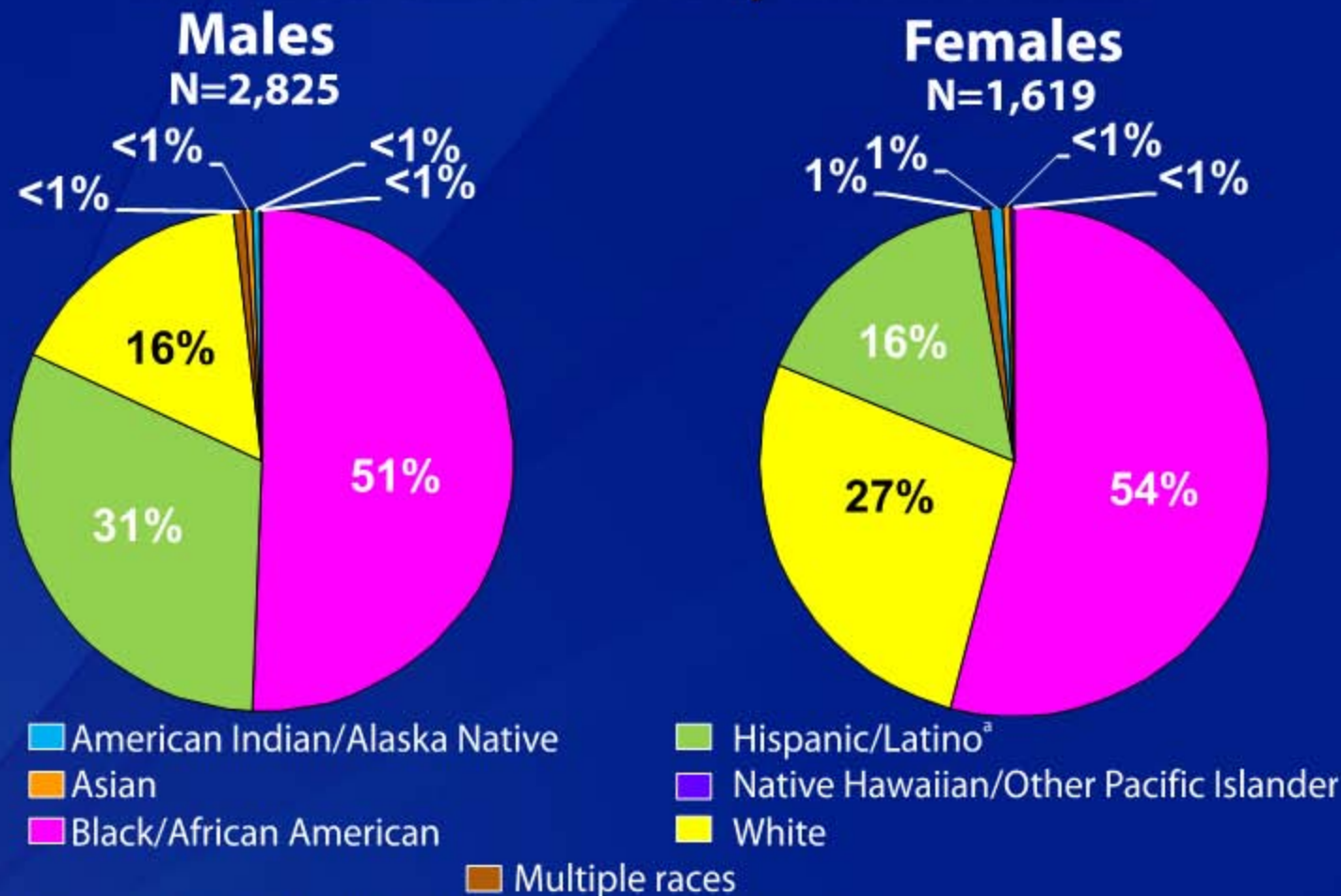
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^b Includes hemophilia, blood transfusion, and risk factor not reported or not identified.



Diagnoses of HIV Infection among Adult and Adolescent Injection Drug Users, by Sex and Race/Ethnicity, 2008— 37 States and 5 U.S. Dependent Areas



Note. Data include persons with a diagnosis of HIV infection regardless of stage of disease at diagnosis. All displayed data have been estimated. Estimated numbers resulted from statistical adjustment that accounted for reporting delays and missing risk-factor information, but not for incomplete reporting. Data on injection drug use among males do not include men who reported sexual contact with other men and injection drug use.

^aHispanics/Latinos can be of any race.



Diagnoses of HIV Infection among Adults and Adolescents by IDU-Related Transmission Category and Age Group, 2008—37 States and 5 U.S. Dependent Areas

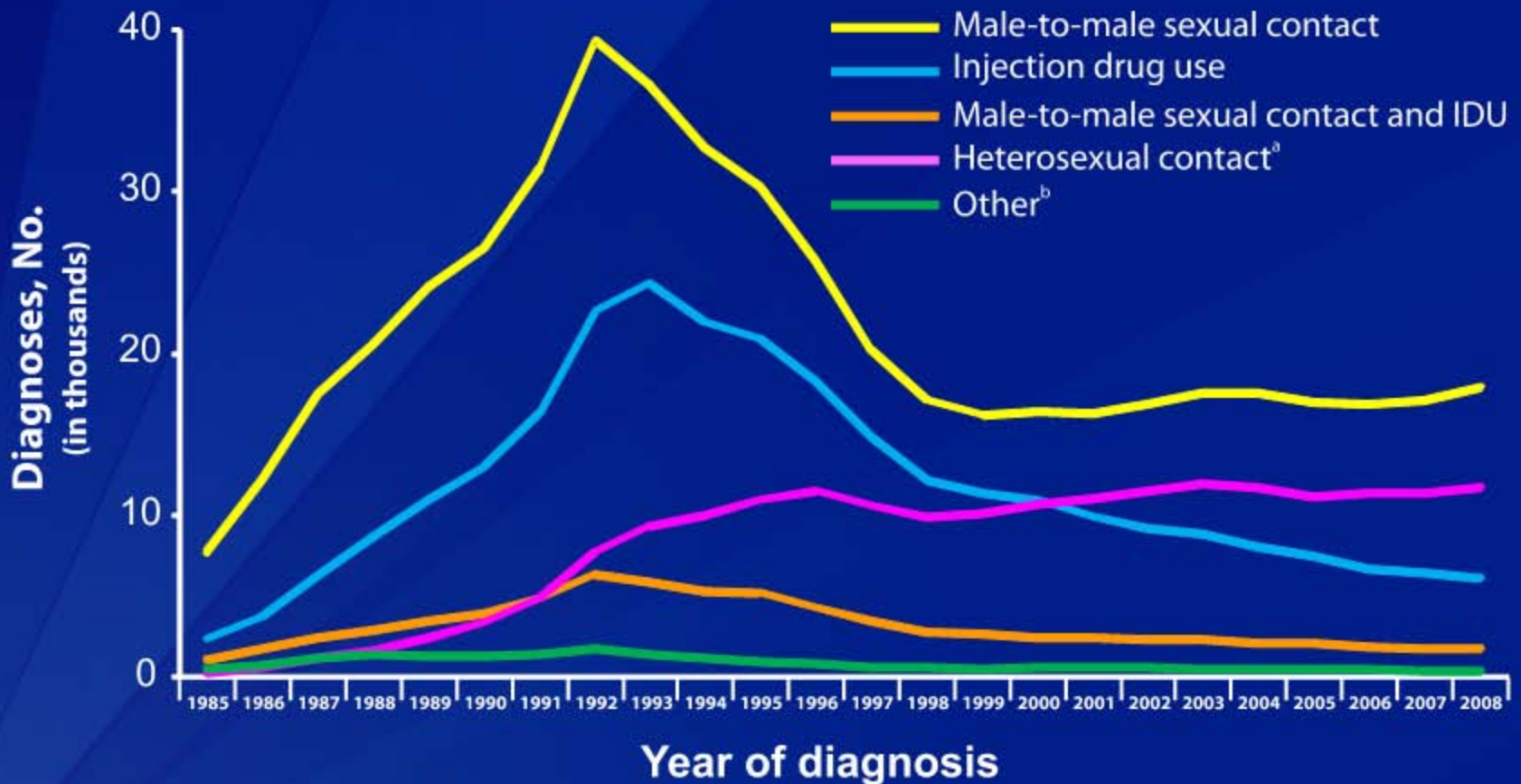
Transmission category	Age group (years), %					Total
	13–19 N=128	20–24 N=386	25–34 N=1,235	35–44 N=1,629	≥45 N=2,238	
Injection drug use	67	63	71	79	87	79
Male-to-male sexual contact and injection drug use	33	37	29	21	13	21
Total	100	100	100	100	100	100

Note. Data include persons with a diagnosis of HIV infection regardless of stage of disease at diagnosis.

All displayed data have been estimated. Estimated numbers resulted from statistical adjustment that accounted for reporting delays and missing risk-factor information, but not for incomplete reporting.



AIDS Diagnoses among Adults and Adolescents, by Transmission Category, 1985–2008— United States and Dependent Areas



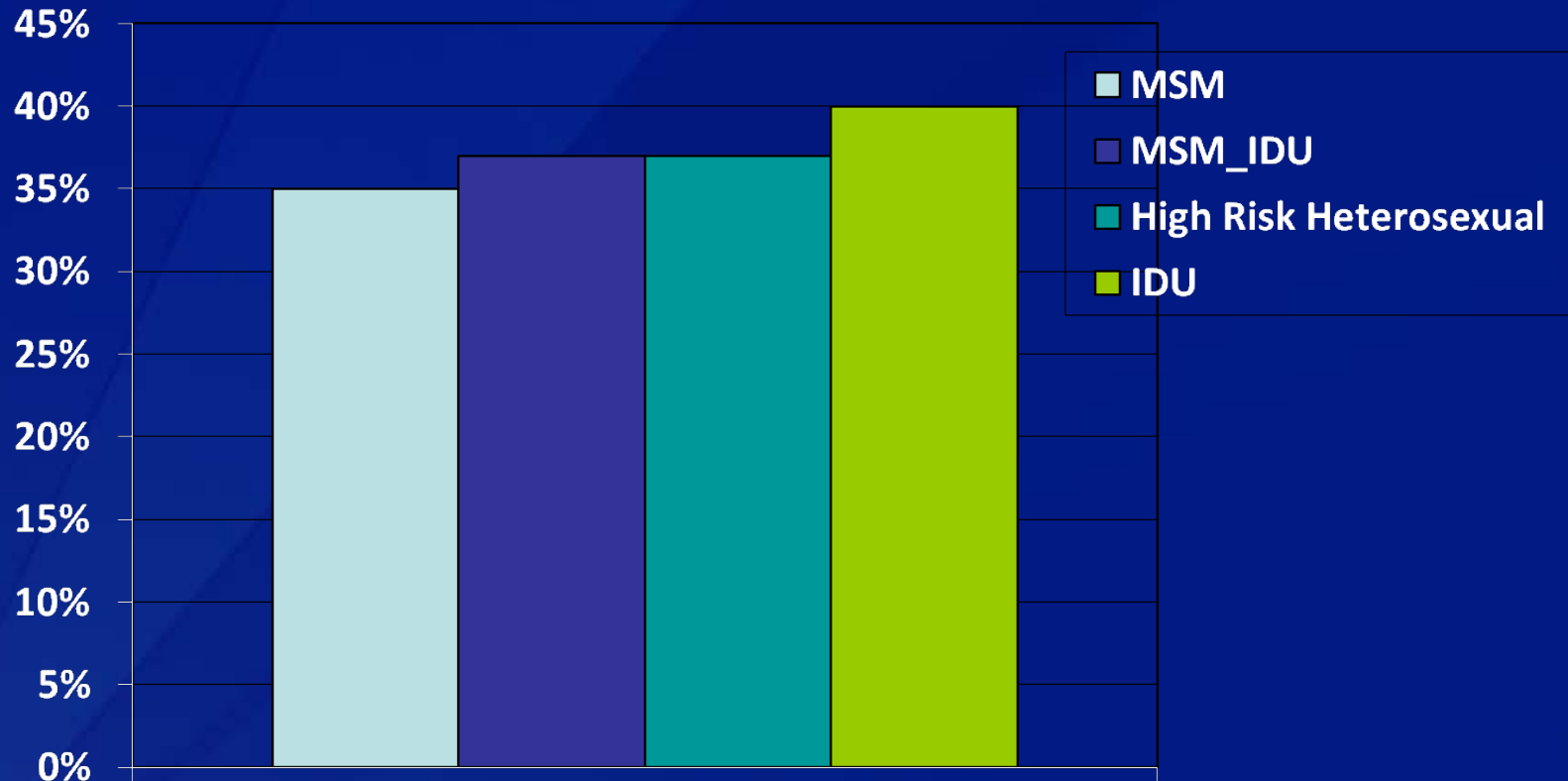
Note. All displayed data have been estimated. Estimated numbers resulted from statistical adjustment that accounted for reporting delays and missing risk-factor information, but not for incomplete reporting.

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^b Includes hemophilia, blood transfusion, and risk factor not reported or not identified.



Late HIV Diagnoses* by Transmission Risk Group



*HIV diagnosis <12 months before a diagnosis of AIDS

MMWR, 2009;58(46);1291-1295

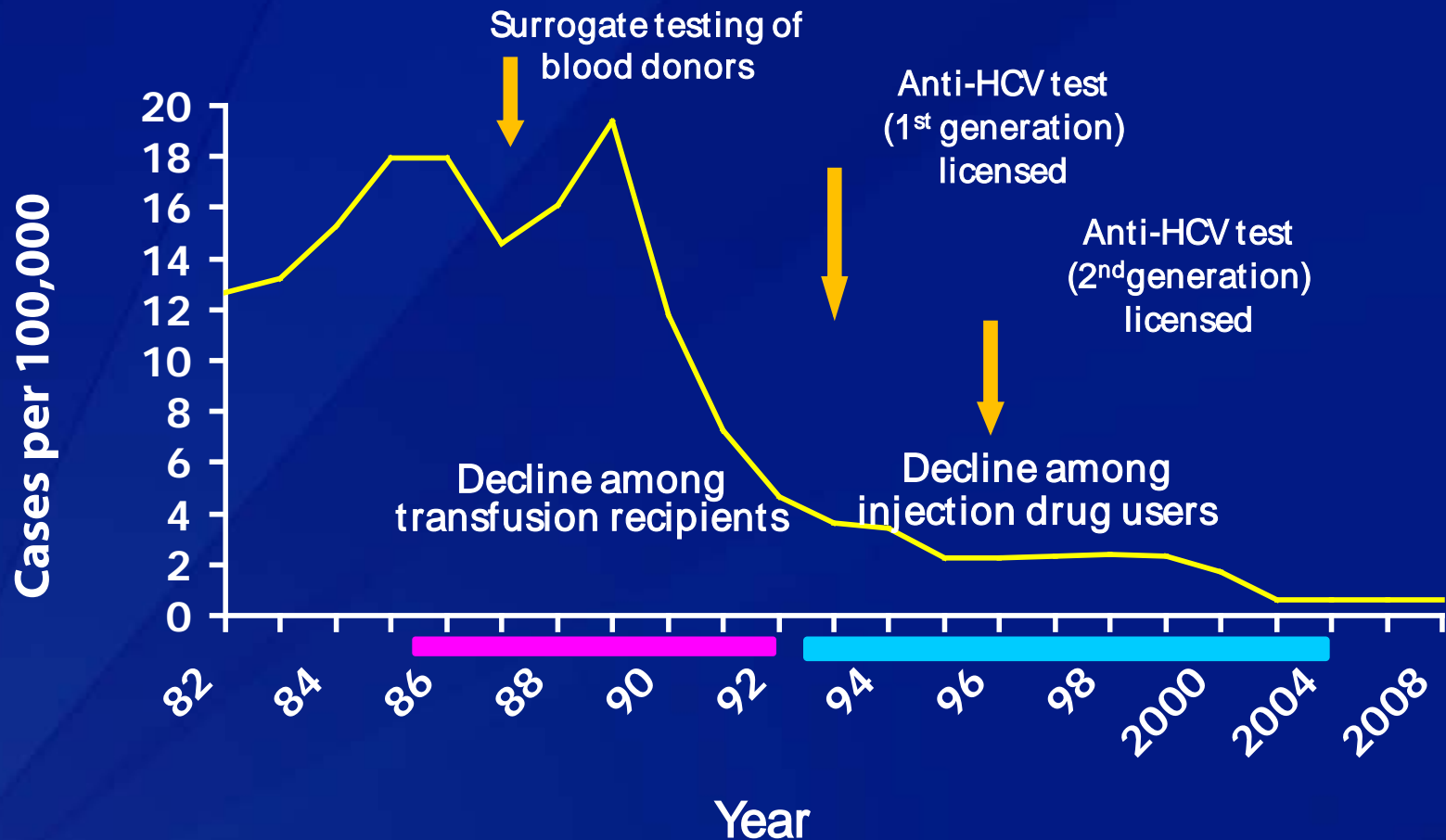
HCV Transmission Among Injecting Drug Users

- HCV prevalence among IDU is high¹ :~ 64 % (95% CI 63.4-64.7%)
 - Transmission risks
 - Years of injection
 - Injection frequency
 - Sharing practices
 - Sex work
- HCV incidence is high among new injectors
 - 18-27 HCV infections/100 persons years persons injecting < 2 years^{2,3}
- HCV prevalence has declined in some cohorts but remains high
 - In Seattle USA from 1994 to 2004, HCV + prevalence fell from 68% to 32%⁴
 - Declines in HCV prevalence temporally associated with
 - Increase use of syringe/needle exchange (48% to 68%)
 - High rates of HCV testing (73%)
 - Knowledge of HCV status to guide sharing practices (39%)⁵
 - Declines noted in other US cities, Australia, Scotland⁴

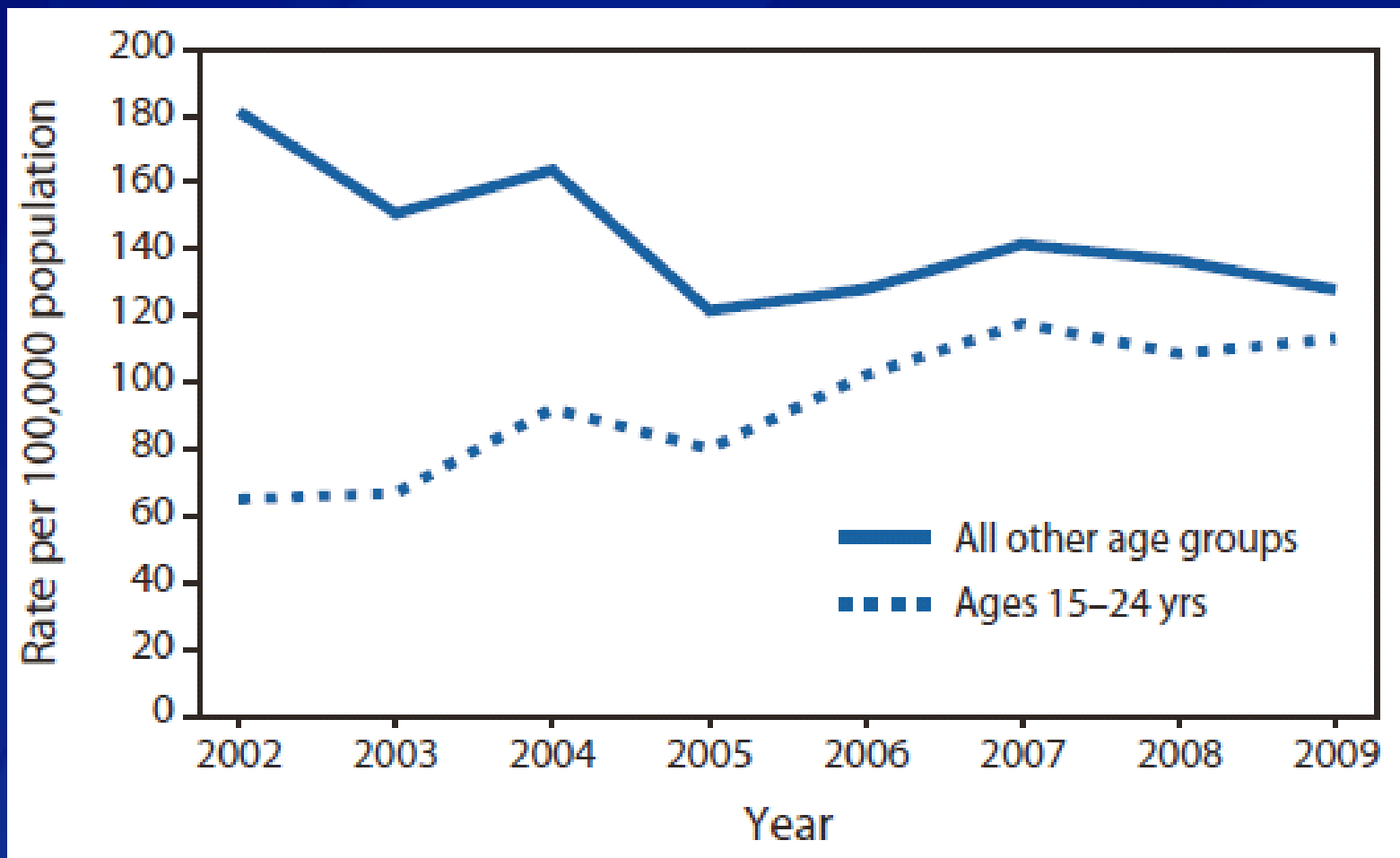
¹ Hagan, et al, Int J Drug Policy 2007; ² Hagan et al, Amer J Public Health 2001.; ³ Lucidarme, et al, Epid and Infect 2004;

⁴ Burt et al, J Urban Health 2007. ⁵ Burt, et al Drug Alcohol Dependence 2009.)

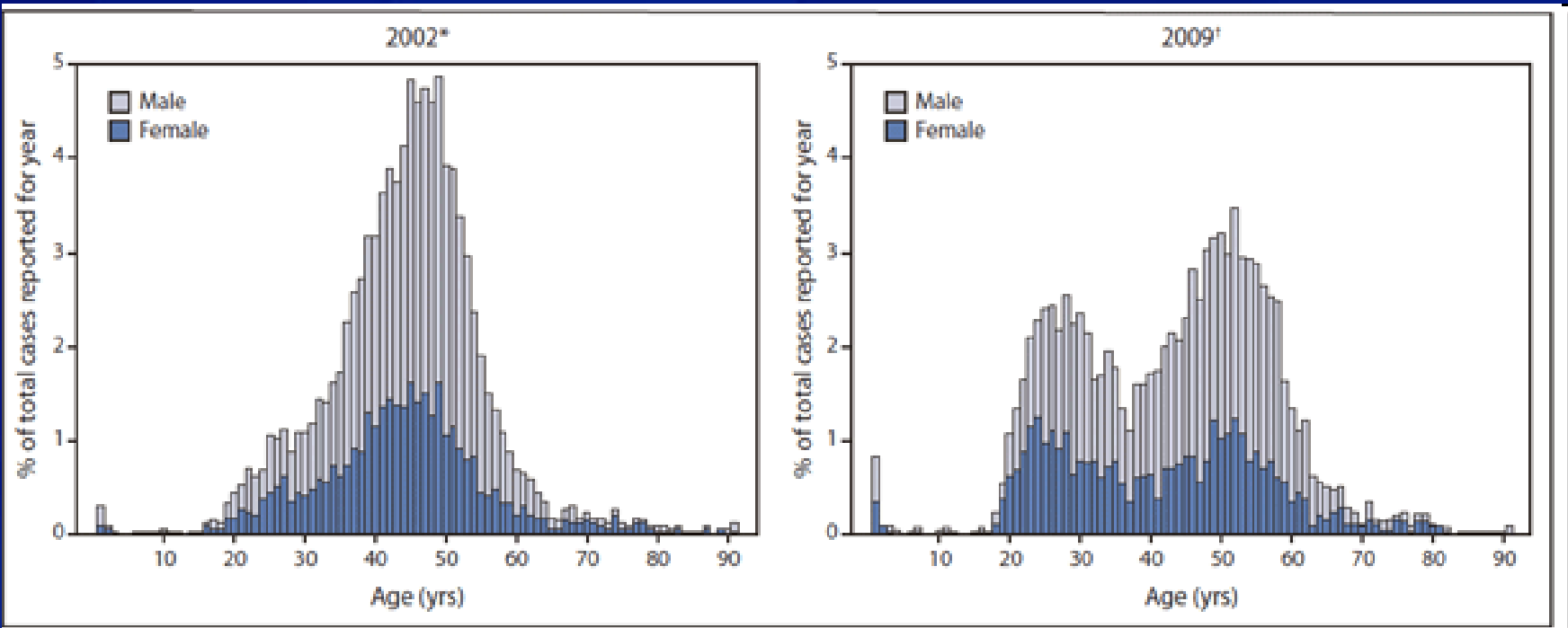
Estimated Incidence of Acute Hepatitis C United States, 1982 - 2008



Rates of newly reported cases of hepatitis C virus infection (confirmed and probable) among persons aged 15--24 years and among all other age groups --- Massachusetts, 2002--2009

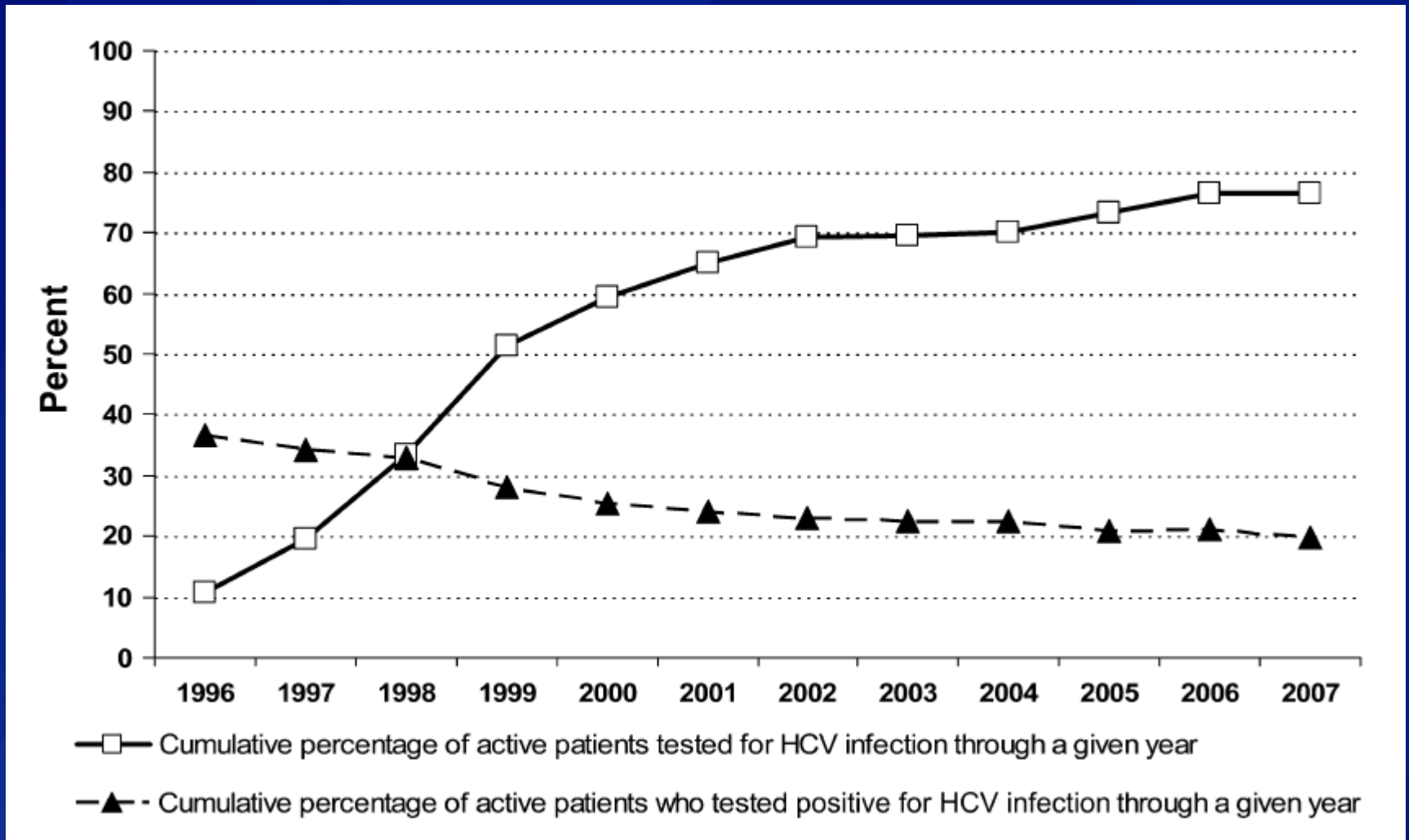


Age distribution of newly reported confirmed cases of hepatitis C virus infection --- Massachusetts, 2002 and 2009



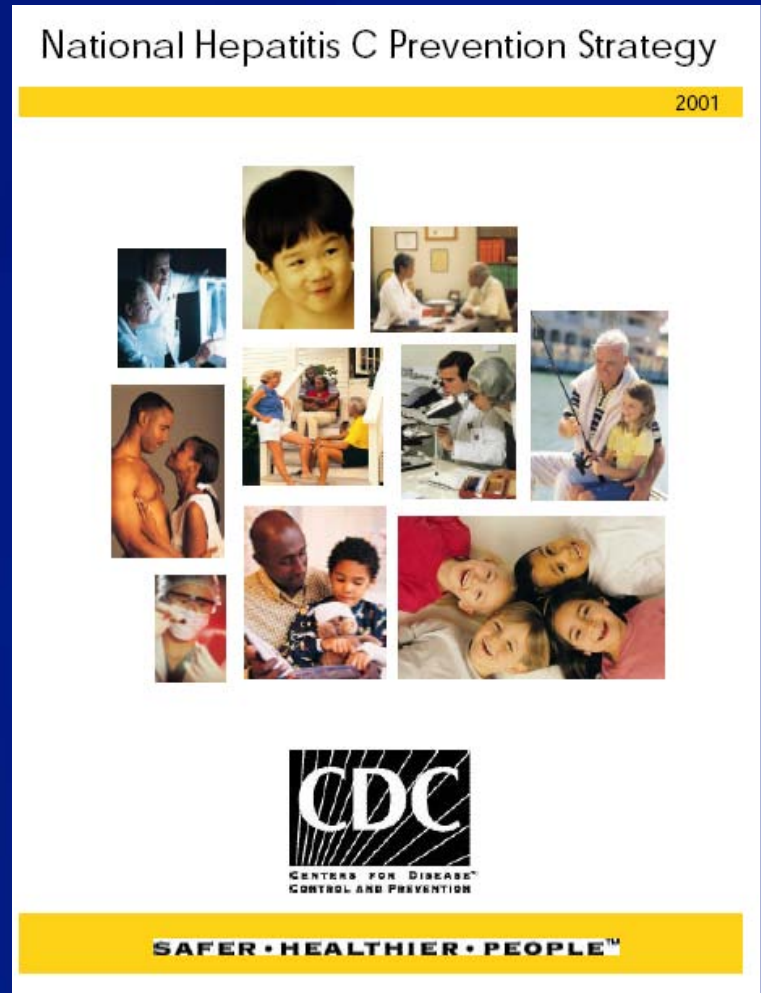
* N = 6,281; excludes 35 cases with missing age or sex information.
† N = 3,904; excludes 346 cases with missing age or sex information.

Percentage of HIV+ patients tested and found positive for HCV infection, by year, HOPS, 1996–2007



U. S. HCV Testing Recommendations

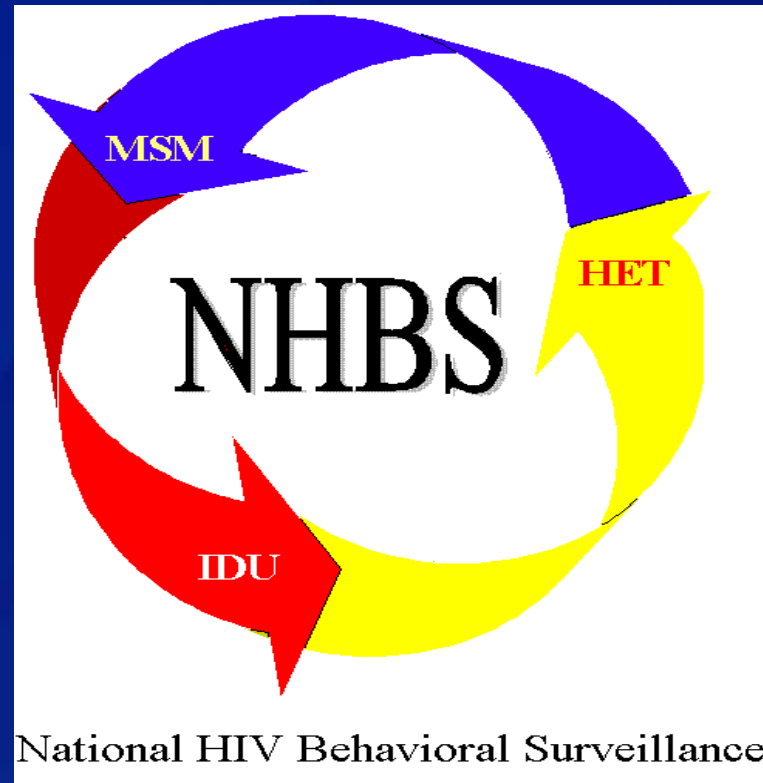
- In the U.S., HCV testing is routinely recommended based on increased risk for infection
 - Ever injected illegal drugs
 - Received clotting factors made before 1987
 - Received blood/organs before July 1992
 - Ever on chronic hemodialysis
 - Evidence of liver disease (elevated ALT)
 - Infants born to HCV infected mothers
 - HIV infection
 - Shared recommendations
 - STD treatment guidelines
 - AASLD treatment guidelines



Combating the Silent Epidemic: U.S. Department of Health and Human Services Action Plan for the Prevention, Care and Treatment of Viral Hepatitis

- The Action Plan covers six broad topics:
 - Educating Providers and Communities to Reduce Health Disparities
 - Improving Testing, Care, and Treatment to Prevent Liver Disease and Cancer
 - Strengthening Surveillance for Viral Hepatitis
 - Eliminating Transmission of Vaccine-Preventable Viral Hepatitis
 - Reducing Viral Hepatitis Cases Caused by Drug-Use Behaviors
 - Protecting Patients and Workers from Health-Care Associated Viral Hepatitis

The National HIV Behavioral Surveillance System (NHBS)



The National HIV Behavioral Surveillance System (NHBS)

- ❑ Monitors prevalence of and trends in:
 - HIV related behaviors
 - Sex
 - Drug use
 - Testing
 - Use of prevention services
 - Serostatus*
- ❑ Among:
 - Men who have sex with men (MSM)
 - Injection drug users (IDU)
 - Heterosexuals at risk (HET)

National HIV Behavioral Surveillance System (NHBS) Round 1, 2004-2007: 25 cities

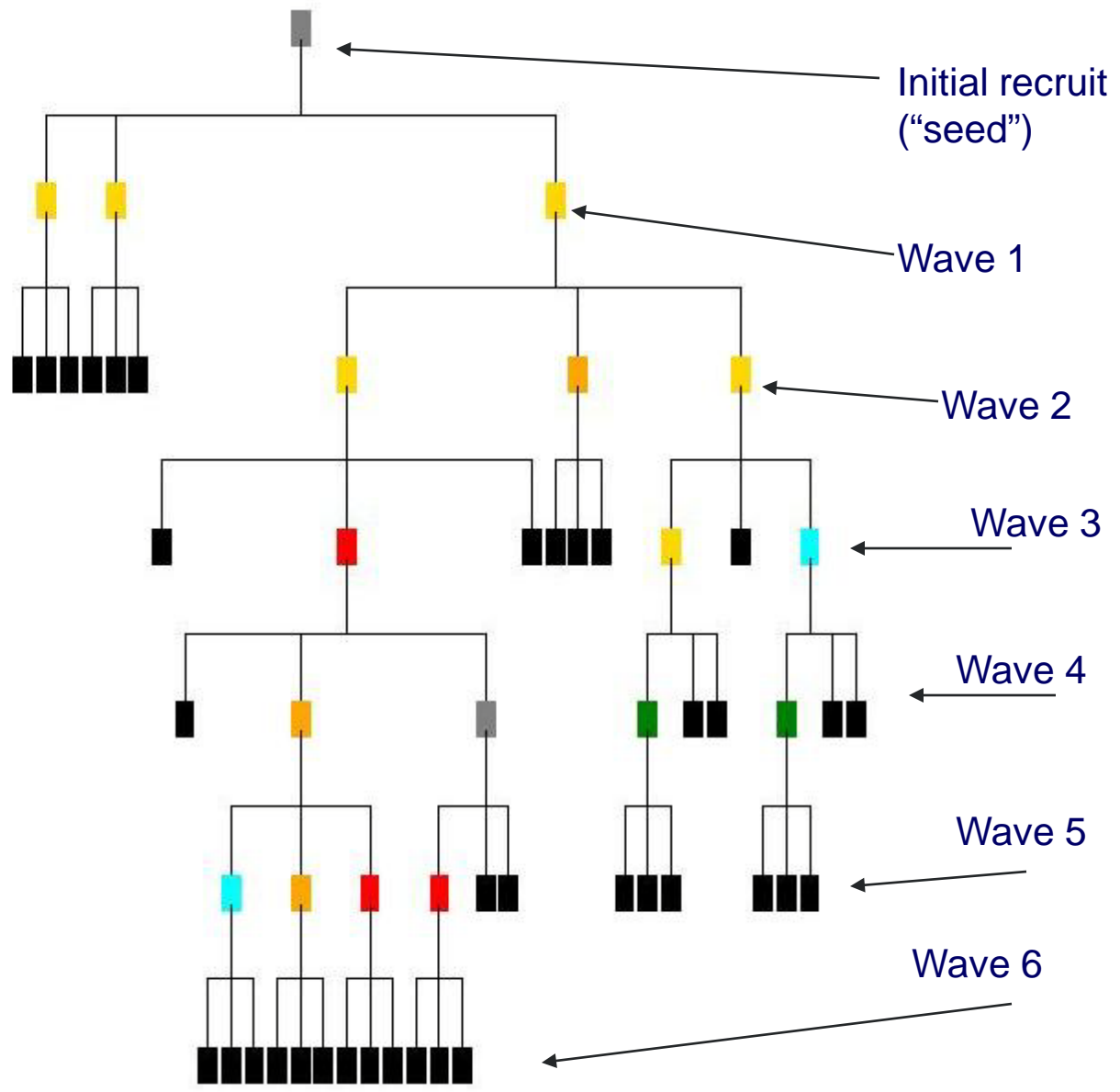


NHBS-IDU1

- ❑ Data collection May 2005 – February 2006
- ❑ Eligibility screener
- ❑ Standardized anonymous questionnaire
- ❑ Face to face interviews

Respondent Driven Sampling (RDS)

- ❑ “Seeds” chosen by staff
- ❑ Seeds complete interview & recruit 3-5 members of their network who also inject drugs
- ❑ Recruits interviewed; recruit 3-5 members of their network who also inject drugs
- ❑ Recruitment & interviewing continues until
 - Target sample size is reached, or
 - End of data collection period
- ❑ Recruitments tracked using coded coupons



MMWR™

Weekly

**HIV Associated Behaviors among
Injecting-Drug Users—
23 Cities, United States,
May 2005 – February 2006**

MMWR: April 10, 2009 (Vol. 58, No. 13)

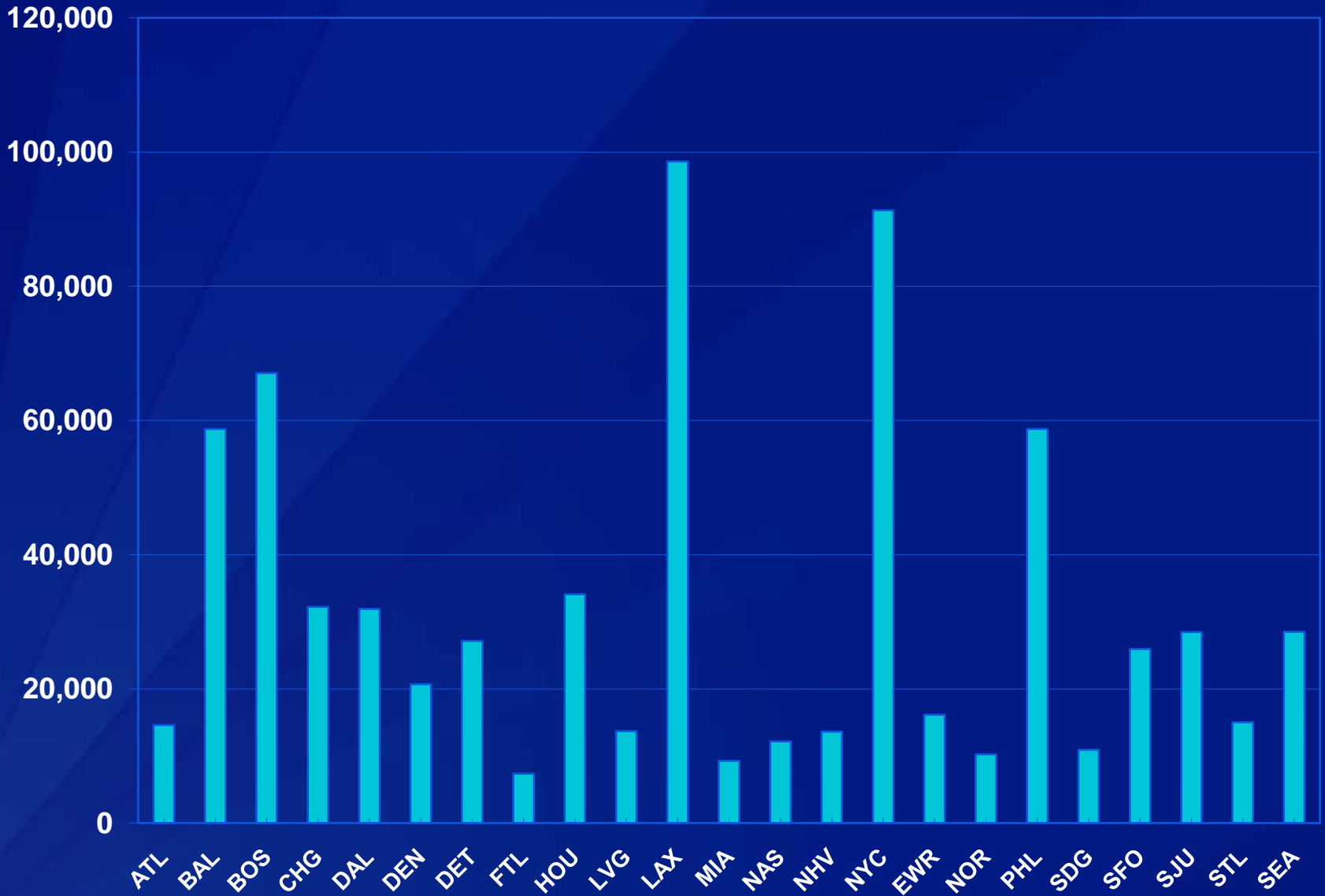
Erratum / Reprinted text:

http://www.cdc.gov/hiv/resources/reports/mmwr/mm5813_err.htm

Analysis Methods

- ❑ **RDS Analysis Tool (RDSAT) adjusts for**
 - Size of IDU network
 - Recruitment biases
 - In-group preference (recruit people like self)
 - Differential recruiting (more/fewer)
- ❑ **Analyses**
 - Prevalence of each indicator for each city
 - Stratified by gender, race/ethnicity, age
 - Aggregated across cities, weighting for the size of the IDU population in each city

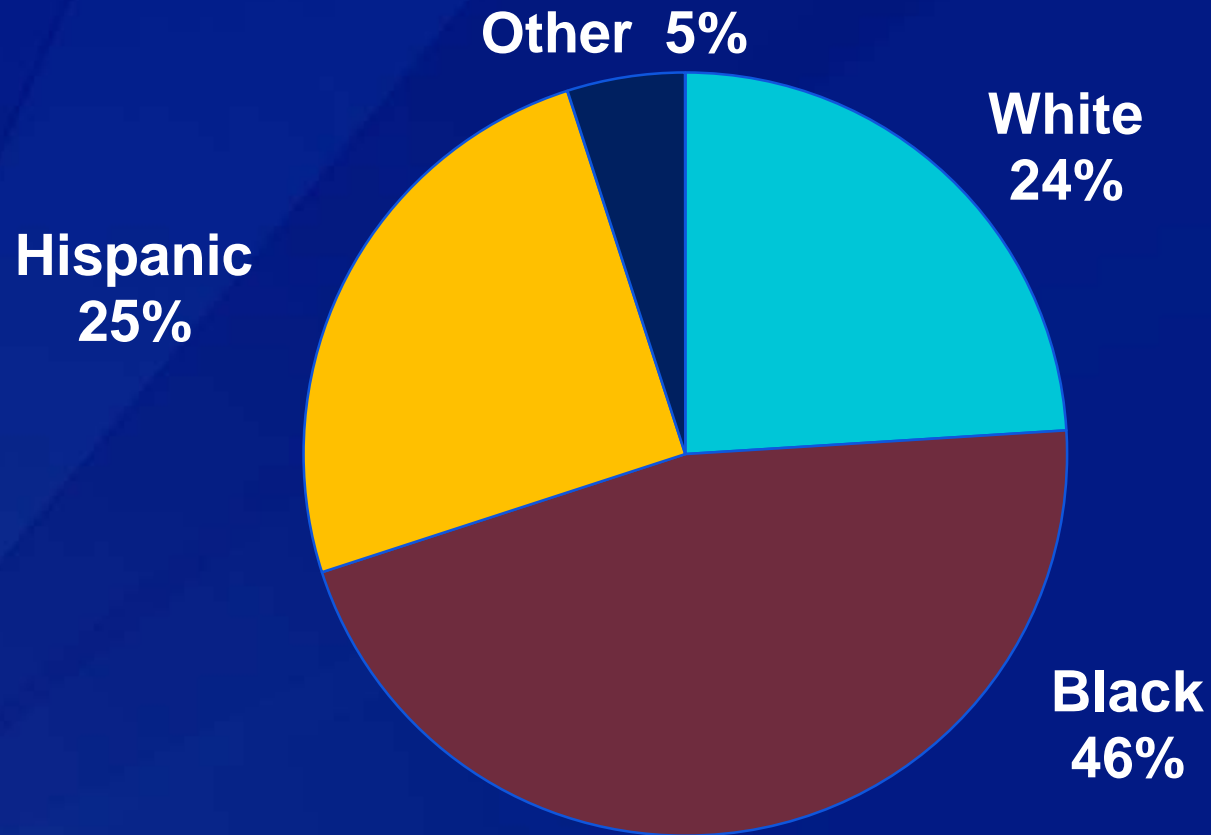
Size of IDU population in each NHBS city (Brady et al (2008))



Characteristics: Race/Ethnicity

NHBS-IDU1

23 Cities, United States, May 2005 – February 2006

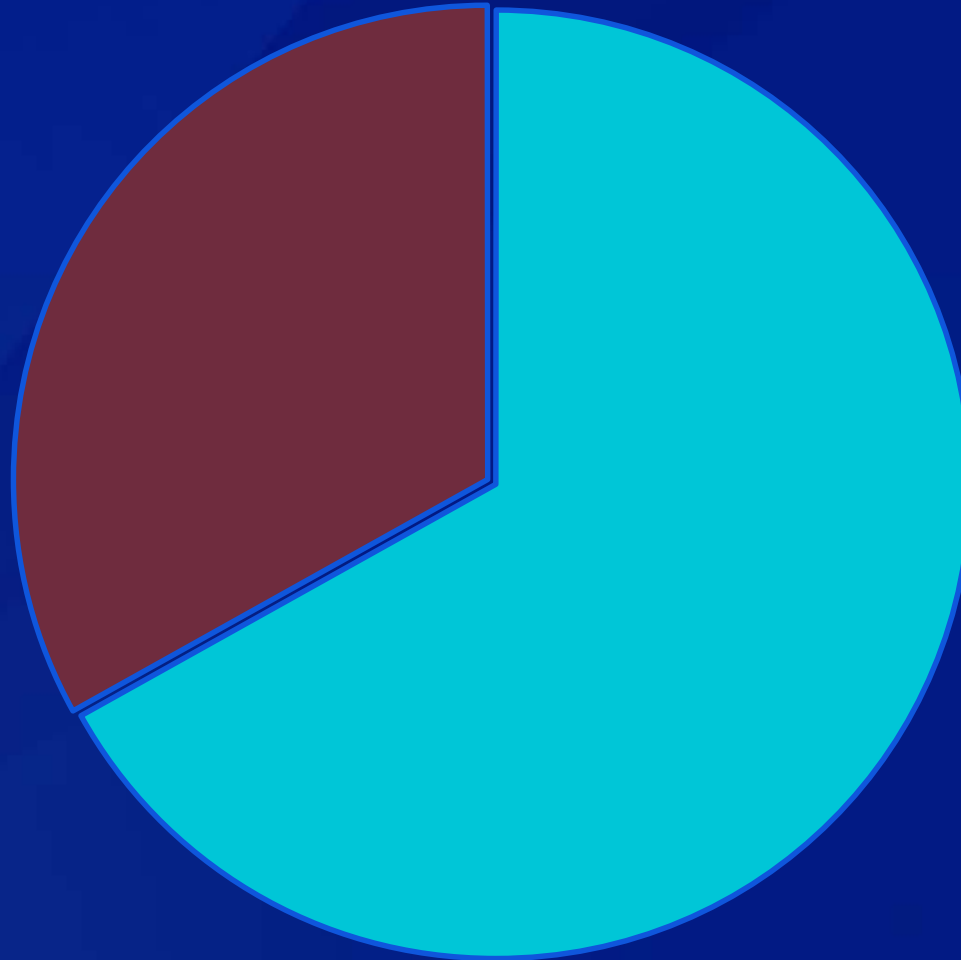


Characteristics: Gender

NHBS-IDU1

23 Cities, United States, May 2005 – February 2006

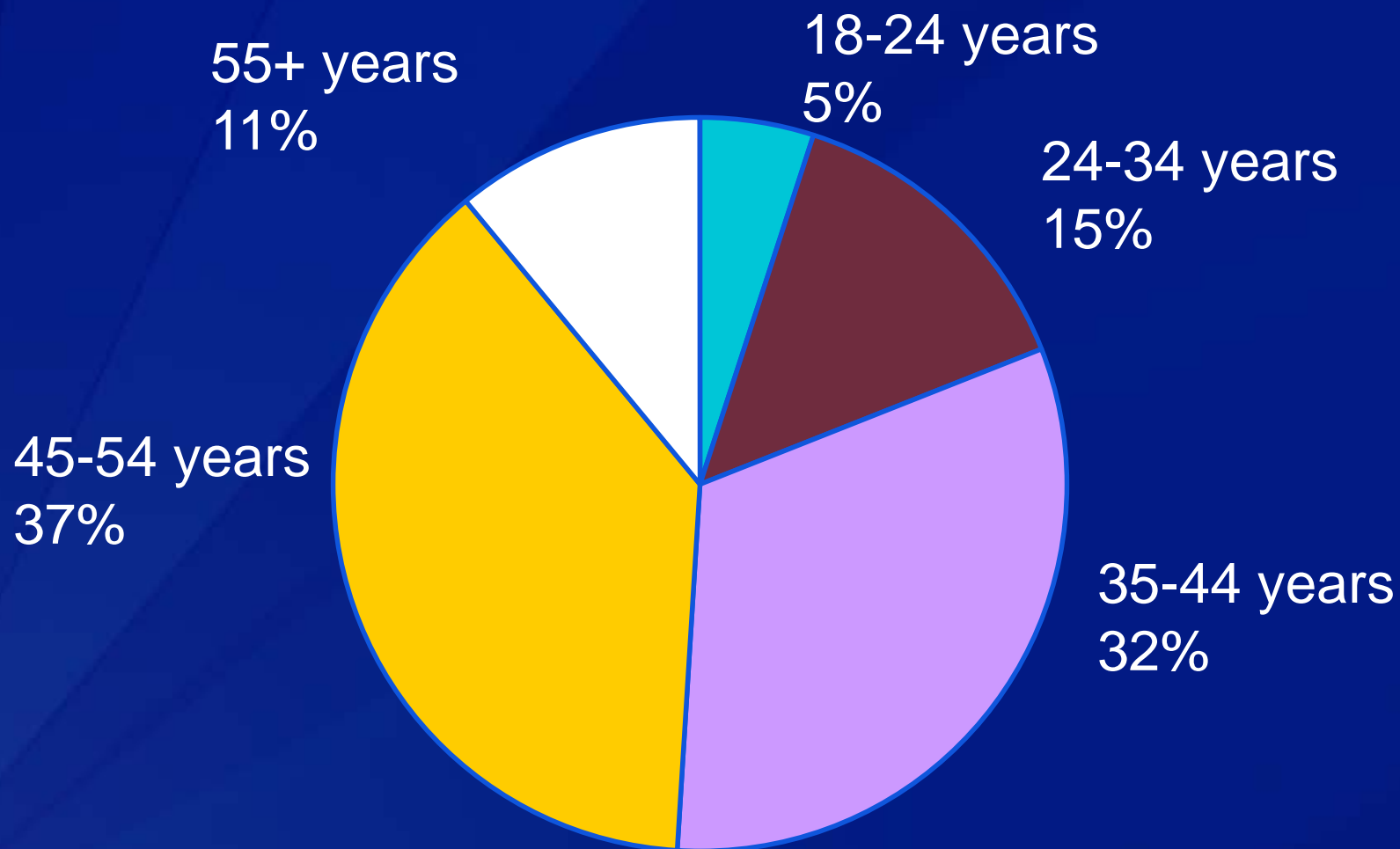
Female
33%



Male
67%

Characteristics: Age Group NHBS-IDU1

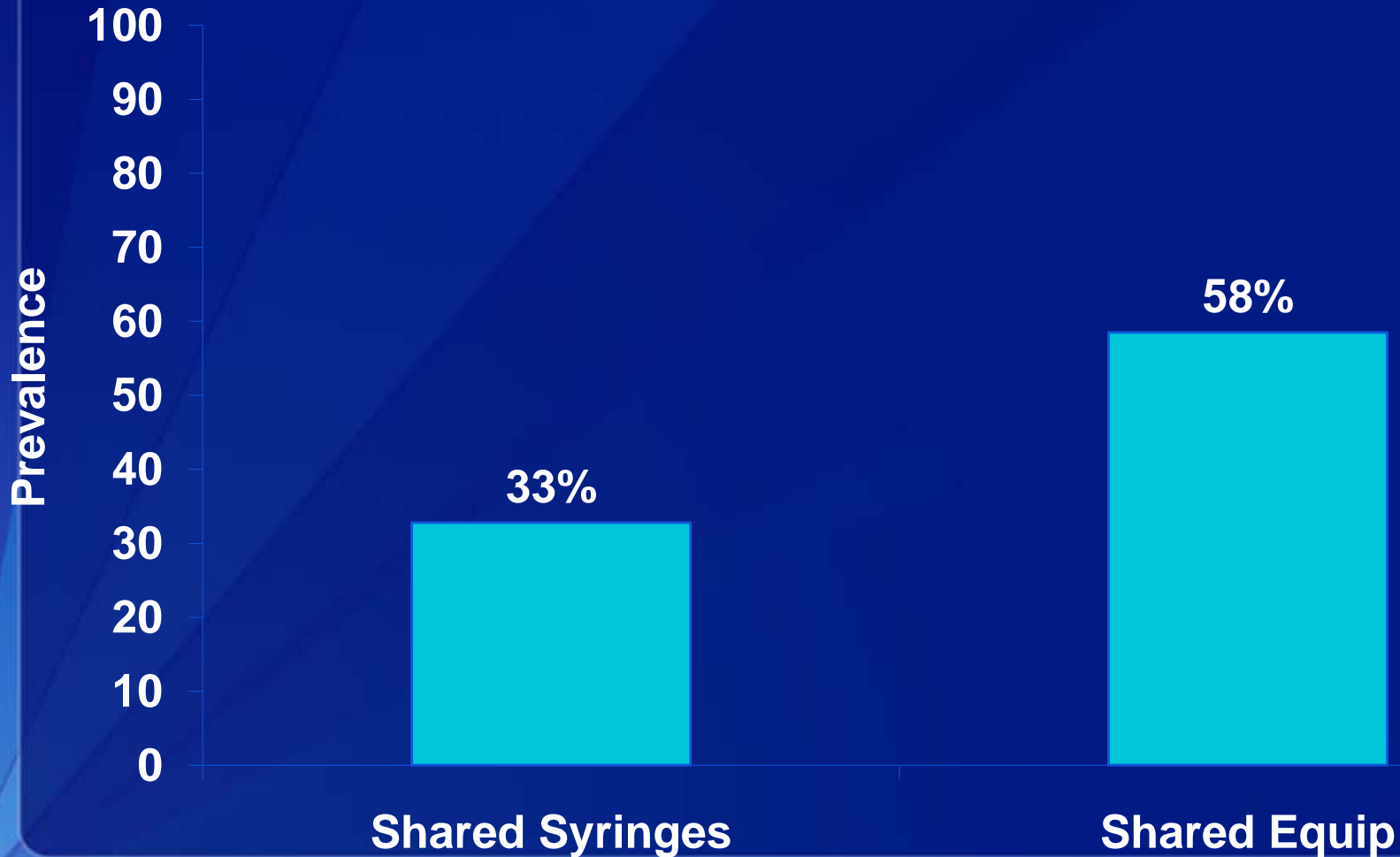
23 Cities, United States, May 2005 – February 2006



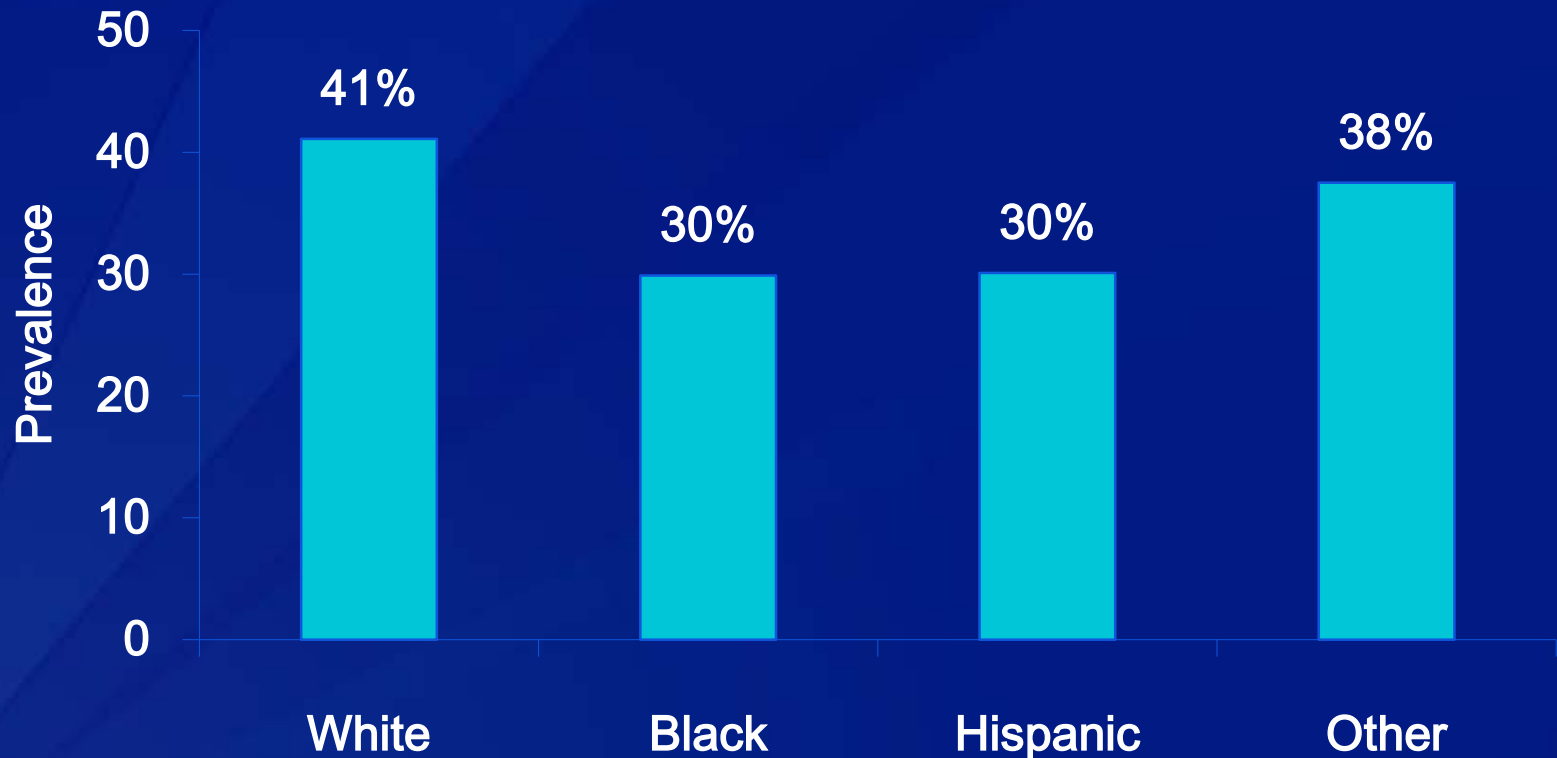
Drug Risk Behaviors

NHBS-IDU1

23 Cities, United States, May 2005 – February 2006



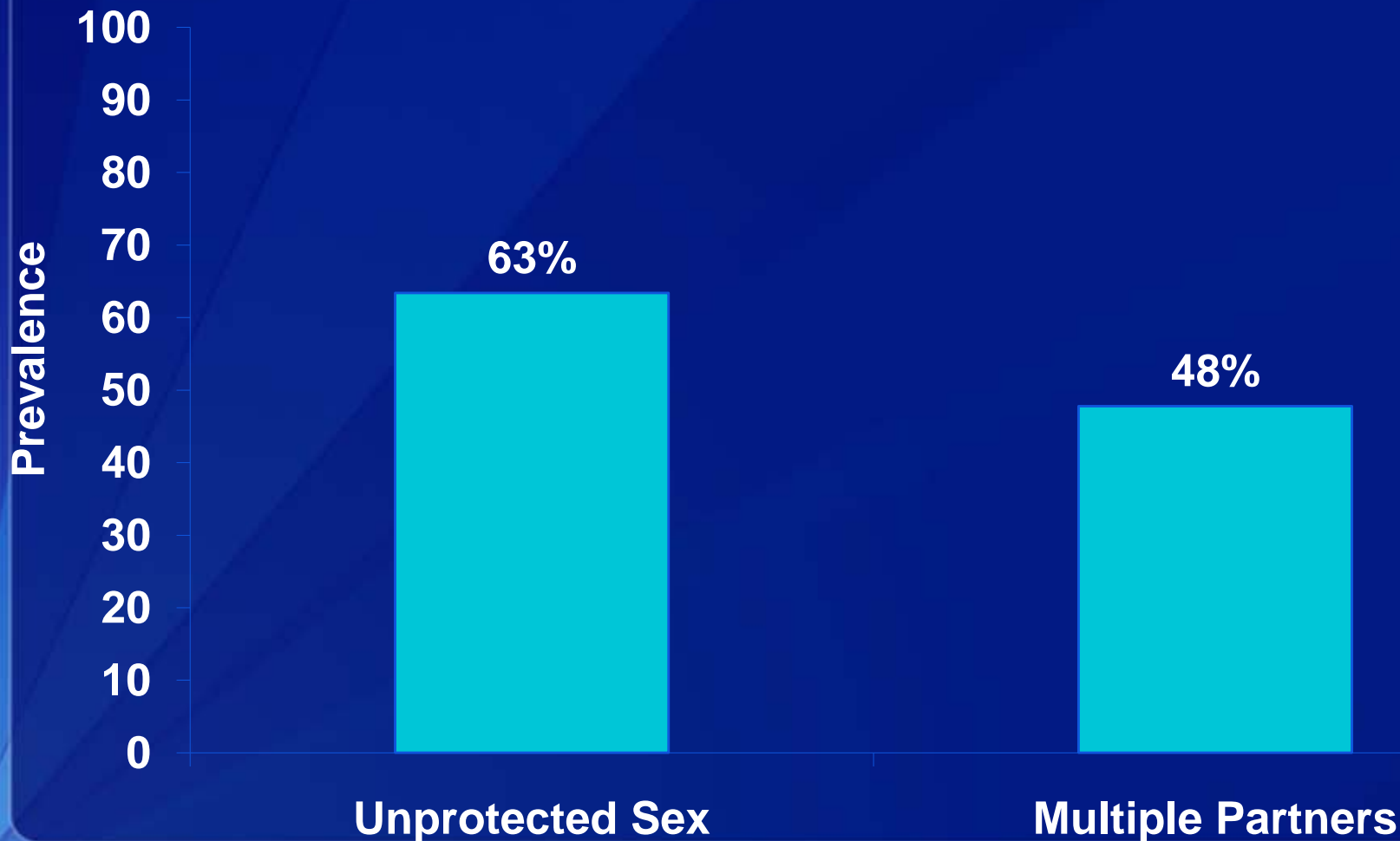
**Prevalence of Syringe Sharing,
by Race/Ethnicity, NHBS-IDU1
23 Cities, United States, May 2005 – February 2006**



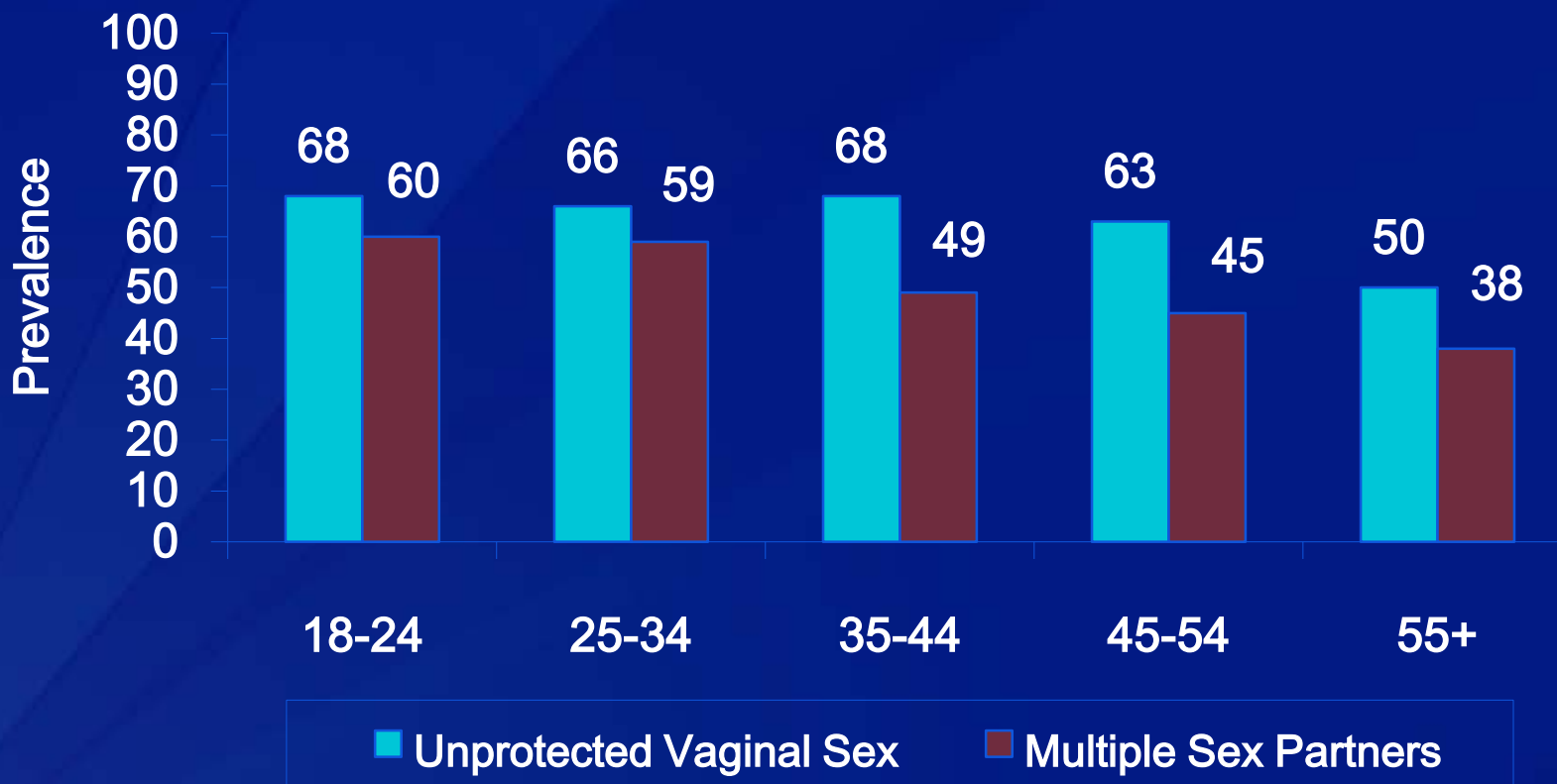
Sexual Risk Behaviors

NHBS-IDU1

23 Cities, United States, May 2005 – February 2006



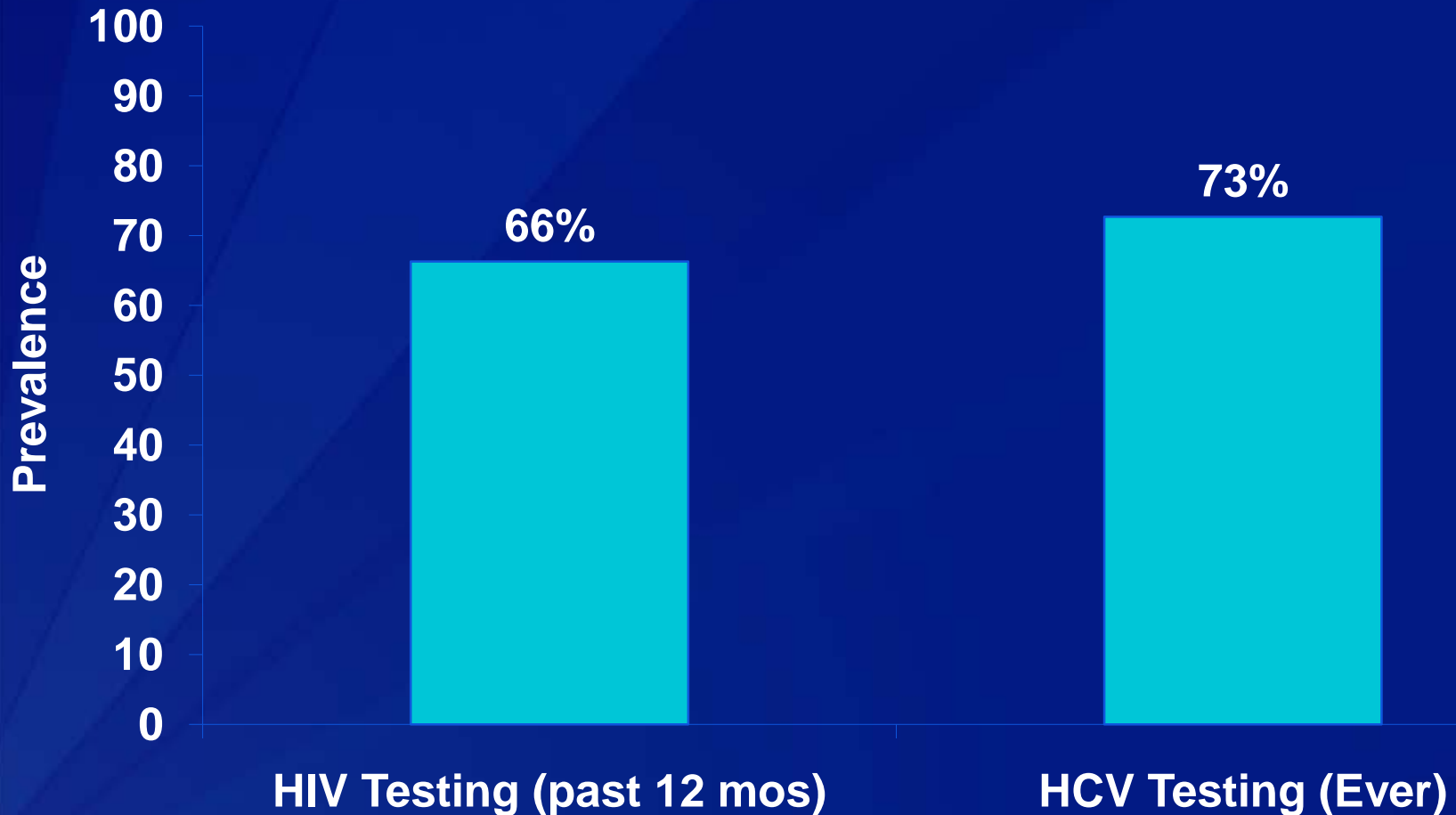
Prevalence of Sexual Risk Behaviors, by Age, NHBS-IDU1 23 Cities, United States, May 2005 – February 2006



Testing Behaviors

NHBS-IDU1

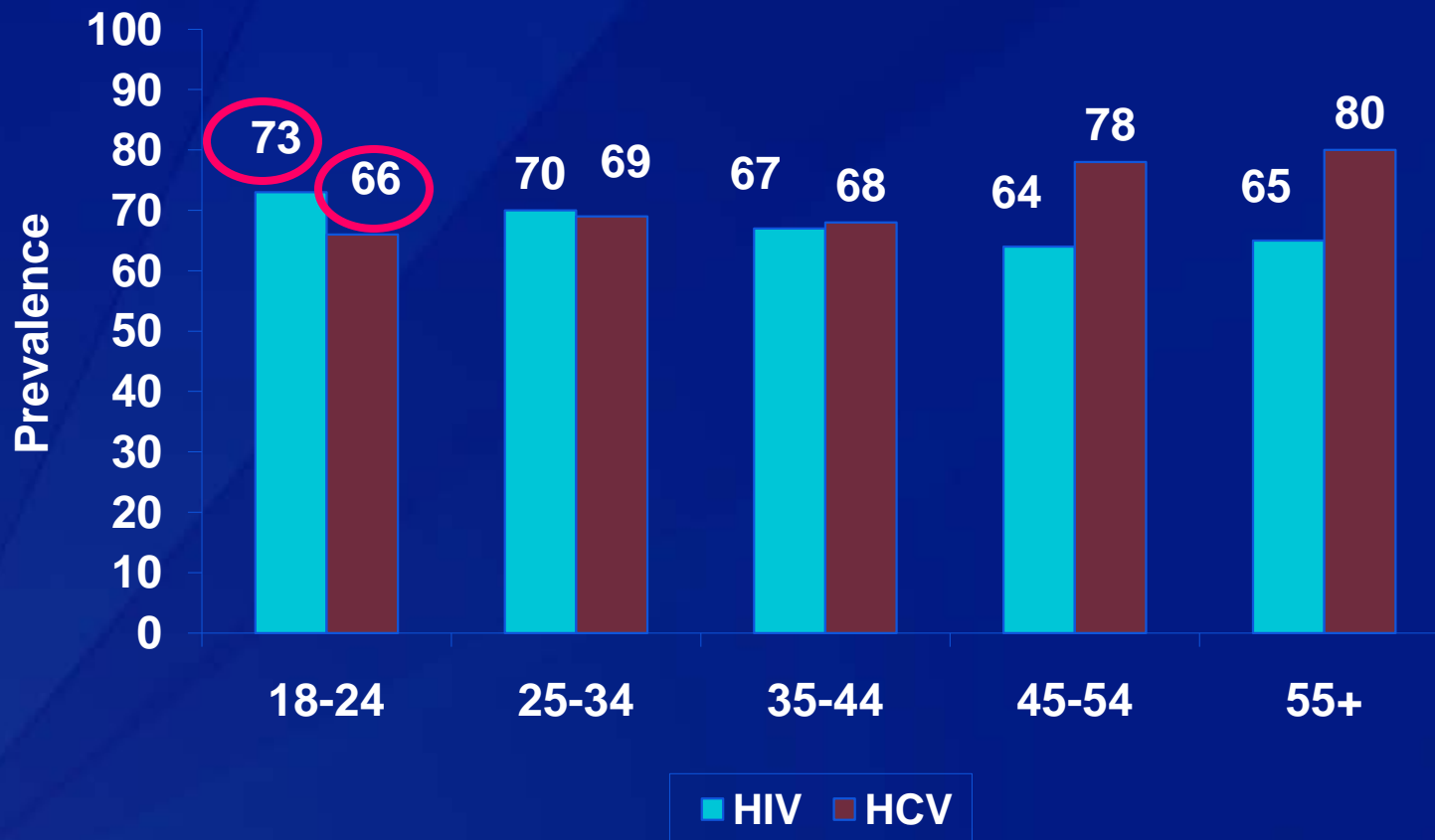
23 Cities, United States, May 2005 – February 2006



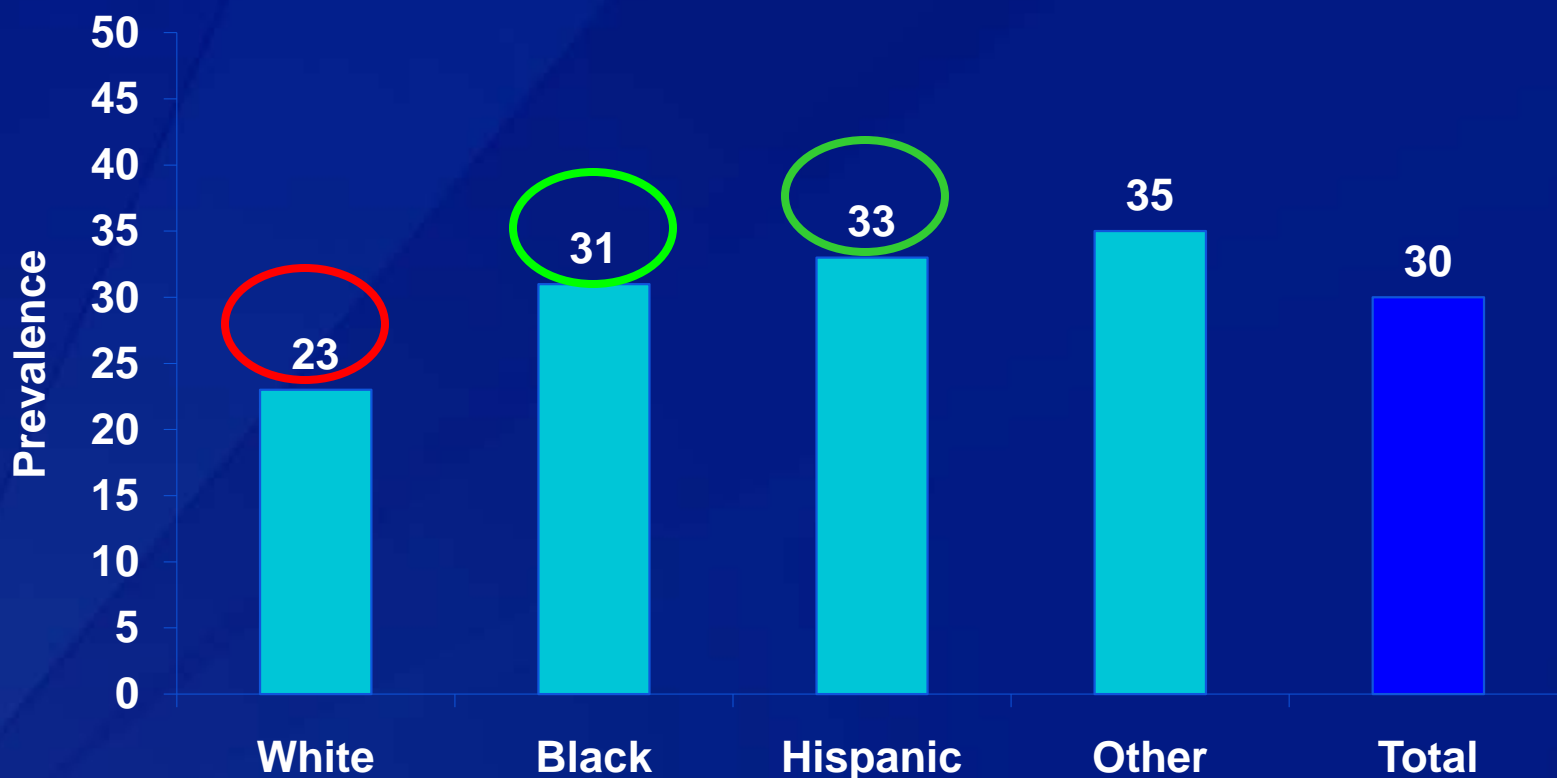
Testing Behaviors by Age Group

NHBS-IDU1

23 Cities, United States, May 2005 – February 2006



Participated in a Behavioral Intervention, by Race/Ethnicity, NHBS-IDU1 23 Cities, United States, May 2005 – February 2006



HIV Surveillance **Report** | Special Report

=====Number xx=====

Forthcoming—Data presented are preliminary

Risk, Prevention, and Testing Behaviors Related to HIV and Hepatitis Infections

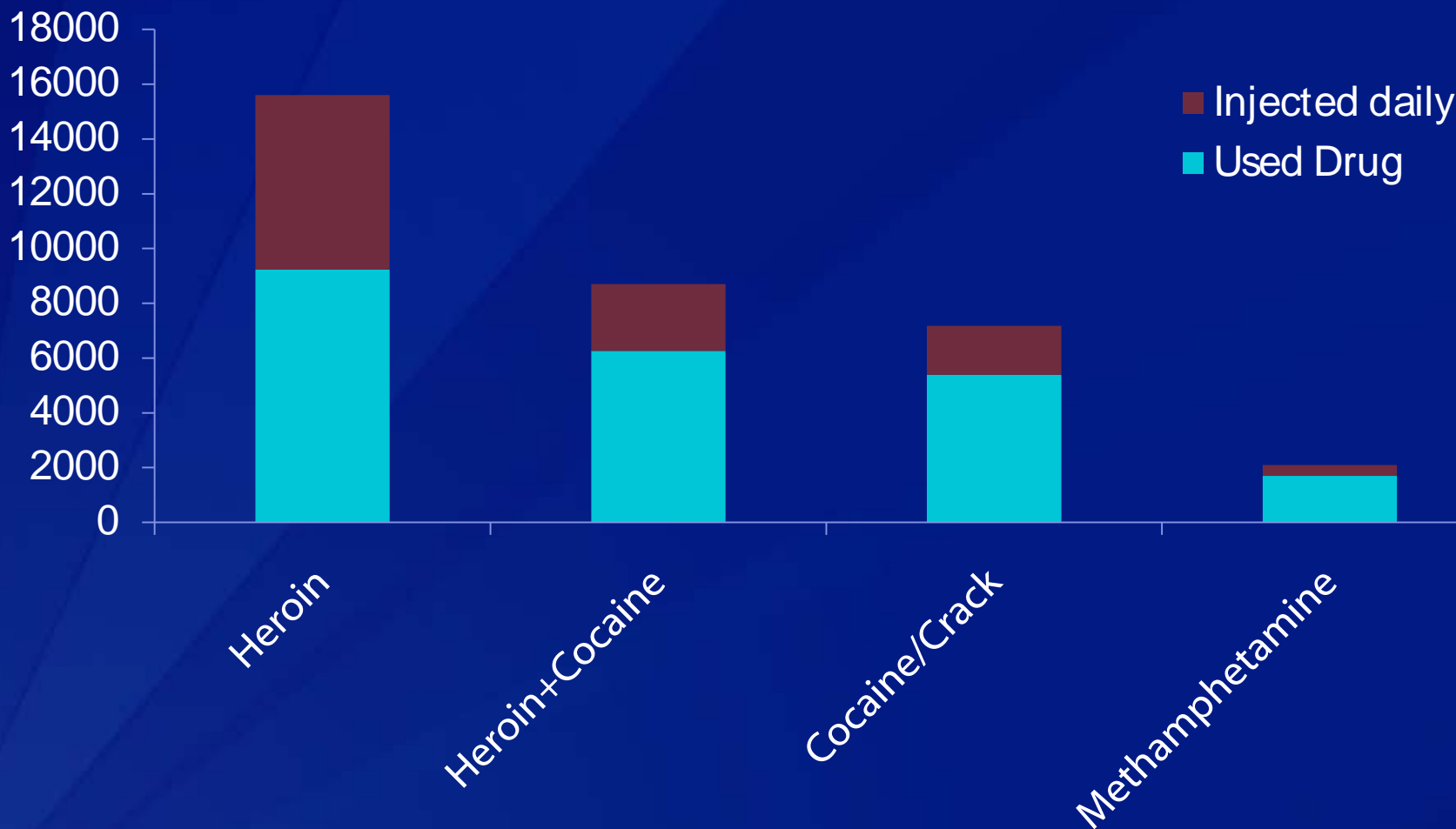
**National HIV Behavioral Surveillance System:
Injecting Drug Users
May 2005 – February 2006**

www.cdc.gov/hiv

Drugs most frequently injected

NHBS-IDU1--23 Cities, May 2005 – February 2006

preliminary data



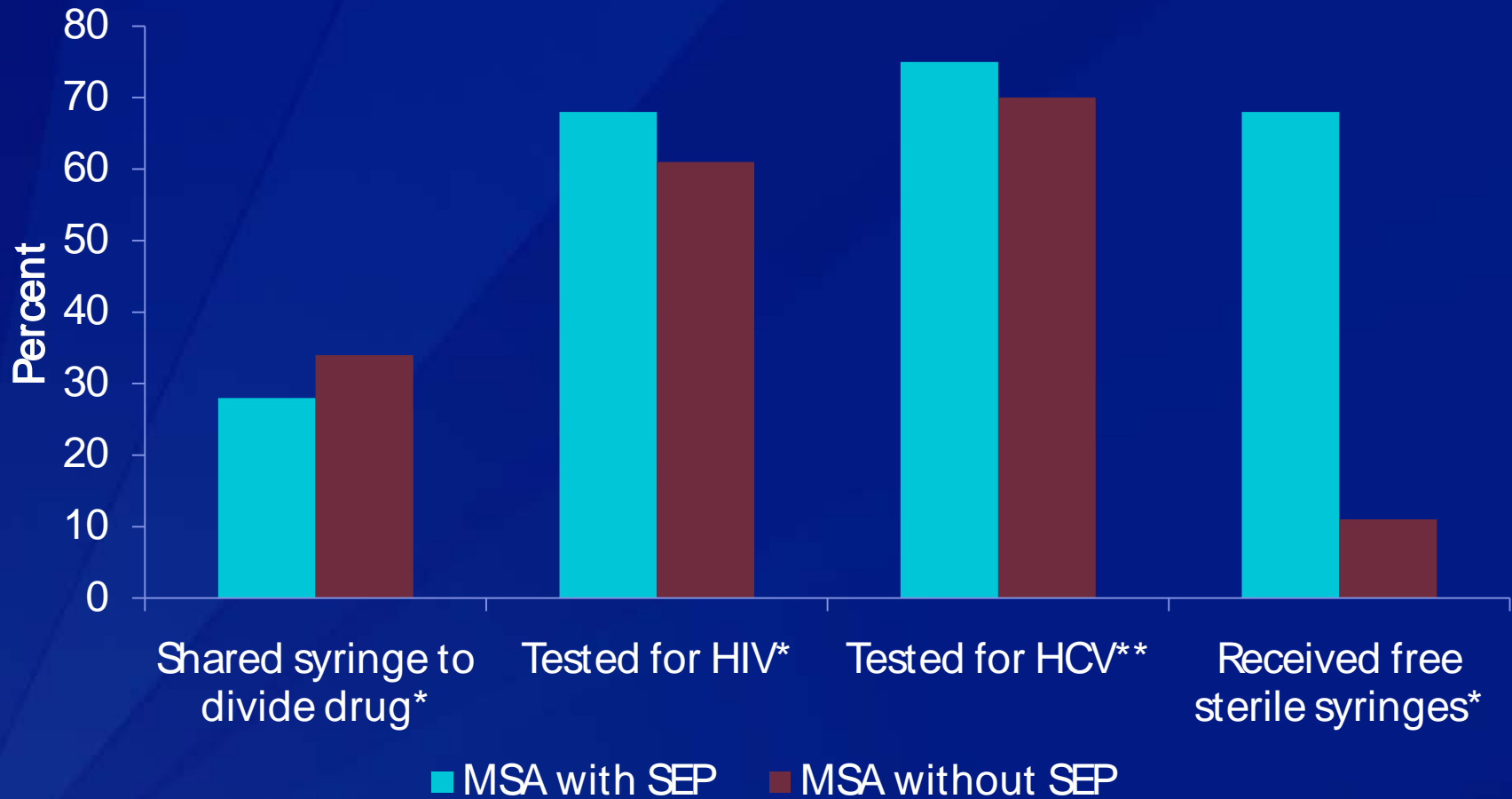
*During the past 12 months; categories are not mutually exclusive

CDC, 2011: Risk, Prevention, and Testing Behaviors Related to HIV and Hepatitis Infections (www.cdc.gov/hiv)

Syringe Exchange Programs

NHBS-IDU1--23 Cities, May 2005 – February 2006

preliminary data



*During the past 12 months

**Ever

CDC, 2011: Risk, Prevention, and Testing Behaviors Related to HIV and Hepatitis Infections (www.cdc.gov/hiv)

Summary

- ❑ First national estimates of risk behavior among IDU
- ❑ Need to focus on injection risks, despite declining incidence
- ❑ IDU at risk from both sex and drugs

Other CDC initiatives related to health of drug users

- ❑ **National IDU Population estimate (in progress)**
 - Systematic literature review
 - Expert Consultation
 - Meta-analysis

- ❑ **Clinical trial of Pre-Exposure Prophylaxis (PrEP) in IDU**
 - Bangkok, Thailand
 - Only PrEP trial among IDU
 - Results expected 2012

- ❑ **PHS Guidelines for Integrated Prevention Services for HIV, Viral Hepatitis, Sexually Transmitted Diseases, and Tuberculosis among Persons who Use Illicit Drugs in the United States (in clearance)**
 - Promotes policy & organizational change to foster integrated services and collaborative activities
 - Target: programs/venues that serve persons who use illicit drugs

Prevention Strategies addressed in Guidelines

- ❑ Substance abuse treatment & prevention
- ❑ Outreach
- ❑ Risk assessment: drug use, infectious disease
- ❑ Screening, diagnosis, and counseling
- ❑ Vaccination
- ❑ Prevention of mother-to-child transmission
- ❑ Risk reduction:
 - ❑ Access to sterile injection and drug preparation equipment
 - ❑ Condom availability
 - ❑ Health education and risk reduction programs and messages
- ❑ Partner services and contact follow up
- ❑ Referrals and linkage to care
- ❑ Treatment for infectious diseases

SYRINGE EXCHANGE PROGRAMS

Use of Federal Funds for Syringe Exchange Programs

- ❑ 1988 – 2009: Restrictions that prevented use of federal funds for syringe exchange programs
- ❑ 2010 : Appropriations Act modified ban
 - Cannot use federal funds for SEP in “any location that has been determined **by the local public health or local law enforcement authorities** to be inappropriate for such distribution.

SSP Program Guidance Documents

- **HHS Implementation Guidance**

- Issued July 2010
- Guiding Principles
- CDC guidance
- SAMHSA guidance

- **CDC Program Guidance**

- Status = in clearance
- Targeted to CDC directly-funded health departments
- Purpose is to provide guidance to support syringe services programs as part of comprehensive HIV prevention programs
- Based on feedback elicited from subject matter experts
- Highlights challenges and best practices for implementing SSP

Components of the CDC Program Guidance

- Principles and elements of comprehensive SSP
- Contextual considerations for SSP
 - Laws, regulations
 - Community relations
- Monitoring and evaluation of program efforts
- Identifying and addressing technical assistance needs

Syringe Exchange Programs and HIV, HCV infection among IDU

- Palmateer (2010) Review of reviews:
 - SEP and HIV, HCV infection
 - HIV incidence: **Tentative evidence** to support effectiveness of SEP in reducing HIV transmission
 - HIV risk behavior: **Substantial evidence** that SEP are effective in preventing HIV risk behavior
 - HCV incidence/prevalence: **Insufficient evidence**

Thank you!

For more information please contact Centers for Disease Control and Prevention

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E-mail: cdcinfo@cdc.gov Web: www.cdc.gov

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention
Division of HIV/AIDS Prevention

