

**Dallas National HIV Behavioral
Surveillance System
2008 Annual Data Report
Men Who Have Sex with Men**



**May 2012
HIV Information and Projects Group
TB/HIV/STD Epidemiology and Surveillance Branch
Texas Department of State Health Services**

Acknowledgements

We wish to acknowledge the following people for their contribution to this report:

Sharon K. Melville, M.D., M.P.H., Principal Investigator

Manager, TB/HIV/STD Epidemiology and Surveillance Branch

Praveen R. Pannala, M.D., M.P.H., Co-Principal Investigator

Medical Epidemiologist/Manager, TB/HIV/STD Information and Projects Group
TB/HIV/STD Epidemiology and Surveillance Branch

This report prepared by Staff of TB/HIV/STD Information and Projects Group:

Nicole Hawkins, M.P.H.

Epidemiologist and Team Lead for this Report

Sonia Arbona, Ph.D.

Medical Geographer

Jesse Campagna, M.P.H.

Epidemiologist

Sarah Novello, M.H.S.

Epidemiologist

Douglas Schuster, M.P.H.

Program Specialist

Shane Sheu, M.P.H.

Epidemiologist/Project Coordinator

Ed Weckerly, M.S.

Epidemiologist

**We would like to thank our contractors at the Public Policy Research Institute,
Texas A&M University:**

Jim Dyer, Ph.D.

Principal Investigator

Alicia Novoa, M.P.H.

Project Manager

Marshall Shaw

Project Data Management

James Bowser

Field Supervisor

Edward Muñoz

Field Supervisor

Field Staff:

Eston Dixon

Sandra Herrera

Alexis Sanchez

Greg Stotts

Anthony Virgil

Shawana Harris

John Marks

Alicia Smith

Gerald Strickland

Elizabeth Yanez

**National HIV Behavioral Surveillance System
Men who Have Sex with Men in Dallas, Texas, 2008**

Table of Contents

Executive Summary	4
Introduction	5
Demographic Characteristics	10
Sexual Behaviors and Risk Factors	13
Alcohol and Drug Use Behaviors	15
Access to Health Care	17
Health Conditions	18
HIV Testing Experiences	19
HIV Prevention Activities	21
Incarceration	23
Study Limitations	25
References	26

This report was supported by Cooperative Agreement Number 1U62PS000968-01 from the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention.

National HIV Behavioral Surveillance System Men who Have Sex with Men in Dallas, Texas, 2008

EXECUTIVE SUMMARY

The National HIV Behavioral Surveillance System (NHBS) is an ongoing behavioral surveillance system that collects cross-sectional data among populations at high risk for acquiring HIV. This report focuses on activities from the data collection cycle that examined men who have sex with men (MSM). Men who have sex with men from the Dallas Metropolitan Division were recruited using venue-based, time sampling from August-December 2008. The following are key findings presented in the report.

Demographics

Study participants were:

- Predominantly Black (44%) and 20-29 years of age (44%)
- Educated with some college (36%) and mostly employed (68%)

Sexual Behaviors

- 13% engaged in oral or anal sex before age 13
- 61% reported unprotected anal sex with main partner; only 55% knew the HIV status of the last sexual partner

Drug Use

- Of those who injected drugs, a majority began at a young age (41% under 19 years)
- Binge drinking was reported by 72% of the surveyed MSM
- 45% of participants reported using drugs, alcohol, or both during last sexual encounter

Access to Healthcare

- 65% had seen a healthcare provider in past 12 months but less than half were offered an HIV test at the visit
- 26% of surveyed MSM tested HIV positive; 54% of those testing positive were unaware of their status

Health Conditions

- 45% of the surveyed MSM reported never being tested for hepatitis C in their lifetime
- Gonorrhea and syphilis were most commonly diagnosed STDs in past 12 months

HIV Testing and Prevention

- Although 83% reported ever being tested for HIV; more than half never received results
- 17% had never been tested at least once for HIV in the past 2 years

Incarceration

- 25% of the surveyed MSM reported being incarcerated in the previous year
- 75% of those incarcerated in the past 12 months were not tested for HIV

INTRODUCTION

The National HIV Behavioral Surveillance System

The National HIV Behavioral Surveillance System is a comprehensive survey for measuring behaviors that place people at risk for HIV infection in cities where approximately 60% of all cases of AIDS had been reported. Initiated and funded in 2003 by the Centers of Disease Control and Prevention, NHBS is an on-going behavioral surveillance system that collects cross-sectional data on sexual and drug use risk behaviors, HIV, sexually transmitted disease (STD), testing behaviors, and utilization of prevention services among population at high risk for acquiring HIV. The surveillance system runs in annual rotating cycles, each year addressing a different high risk population: injection drug users (IDU), men who have sex with men (MSM), and heterosexuals at increased risk of HIV infection (HET). In 2008, Dallas, Texas, was one of 21 cities with high HIV/AIDS morbidity in the U.S. participating in NHBS (Figure 1).

Figure 1. National HIV Behavioral Surveillance System Sites, 2008.



Source: The Centers for Disease Control and Prevention (CDC), 2010.

The second cycle of NHBS that examined men who have sex with men (MSM2) occurred from August - November 2008. The following report presents data that was collected during MSM2 in the Dallas Metropolitan Division (MD).

Formative Assessment

Formative research is conducted prior to implementation of each NHBS cycle in order to guide and maximize data collection activities. The goals of the formative research activities are to describe the characteristics of MSM in the Dallas Metropolitan Division, to gain an understanding of the context of HIV risk behavior among Dallas MSM, to garner the support of community stakeholders for the NHBS MSM behavioral survey, to

identify venues attended by MSM, to assess the suitability of venues for recruiting participants and conducting surveillance activities, and to monitor the ongoing implementation of the NHBS MSM cycle. The formative research is an iterative process that involved four phases where the NHBS staff:

1. Compiled a list of agencies and organizations providing HIV Prevention and Services in the Dallas-Fort Worth Metropolitan Division
2. Conducted key informant interviews
3. Interviewed focus groups; and
4. Conducted brief street intercepts and observations.

Once the NHBS staff identified local community stakeholders providing HIV prevention and services, NHBS staff began informal conversations to gain an understanding of the context of HIV risk behavior among Dallas MSM. Additionally, formal interviews with key informants of various races, ages, and gender were conducted. The majority of key informants were staff from community based organizations serving the Dallas area. These agencies conduct ongoing and current outreach into the Dallas MSM community. Other key informants worked for agencies which specifically target African American and Hispanic MSM in the Dallas area, thus giving valuable insights into the social networks of these MSM subgroups. Three focus groups which consisted of the general MSM population, African American MSM population, and Hispanic MSM population were conducted to ensure completeness of qualitative data collected and to confirm results found in the key informant interviews. Topics explored with key informant and focus groups included general characteristics of MSM in Dallas, barriers to recruiting MSM for surveys, and ideal venues for recruiting and conducting surveillance activities.

Qualitative data collected during the formative assessment were compiled in a comprehensive report and used to guide data collection activities. Formative research continued even during data collection to monitor important indicators such as enrollment numbers, sample characteristics, participation barriers, identification of one-time recruitment events selected non-randomly, the opening of new venues and the closing of existing venues.

Findings from the formative research indicate that the Dallas area gay and MSM community is fragmented, though within subpopulations, the MSM communities feel a sense of unity or “in-group” dynamism. Divisions arise among age and economic groups as easily as they do among racial and ethnic lines. The fear of HIV/AIDS and the stigma of homosexuality continue to exist in the community. The fear of government involvement in their communities is often seen as unnerving or intrusive, but these fears have been mitigated through ongoing community involvement by NHBS staff. Many venues are viewed by the minority MSM groups to be mostly “white” clubs, leading NHBS to identify and include a number of formal and informal venues frequented by African American and Hispanic MSM. Additionally, as many varied venues as possible were identified in order to recruit non-gay identifying MSM. As a result, 29 venues were sampled in the MSM2 cycle with the majority of venues being bars. Other venues

include dance clubs, restaurants, social organizations, pride events, retail businesses, and sexually oriented establishments.

Venue Based Sampling

NHBS MSM2 used Venue-Based, Time Sampling (VBS) to recruit individuals into the project in accordance with the national protocol (Centers for Disease Control and Prevention, 2008). The VBS methodology was used to generate probability estimates of hard to reach populations when sampling frames of the individual members of those populations do not exist (Muhib et al, 2001). The first component consists of NHBS staff conducting formative research to learn about the venues, times, and methods to recruit MSM. This objective was achieved through a thorough review of print and online advertisements for MSM and key informant interviews with community-based organizations, service providers, and MSM venue owners. The next component consists of NHBS staff constructing monthly sampling frames of eligible venues and venue-specific, day-time periods (VDTs). Venue day time units (e.g. venue, Monday, 6pm-8pm) represented the type of locations (e.g. bars, public parks), days, and times where MSM congregate. These venue day time units formed the sampling frame. After the venue day time units were identified, NHBS staff randomly selected and visited the venue during that prescribed day and time. In the last component, two NHBS staff (one assigned as the recruiter and another as the counter) recruited individuals from a randomly selected venue. During this time, all men who appeared 18 years or older and who crossed a predetermined line or entered a defined space were counted. The staff who served as a recruiter approached those men who were counted and conducted a brief street interview. The street interview determined whether the individual was eligible to participate in the survey. If the individual was eligible, the recruiter described the general purpose of the study, explained what was requested of participants, and attempted to recruit the individual for the survey. VBS data collection events continued until an eligible sample size close to 500 participants was met.

Methods

From August to December 2008, 478 MSM were sampled. Individuals who were eligible were assigned unique identifiers so that no names or other identifying information were collected, and administered a face-to-face interview if they consented. Participants were also asked to consent to an anonymous HIV test. All survey responses were collected anonymously on hand-held computers. Participants received \$20 upon completion of the survey and an additional \$20 for taking the rapid HIV test.

If a positive HIV result was obtained during the rapid test, a saliva sample was collected and sent to the DSHS laboratory for confirmatory testing. Participants who self-identified as HIV positive before testing were only given confirmatory testing. All participants received HIV prevention counseling with trained staff and a referral sheet with local HIV service organizations. Individuals with preliminary positive test results scheduled follow-up appointments to return for confirmatory tests results.

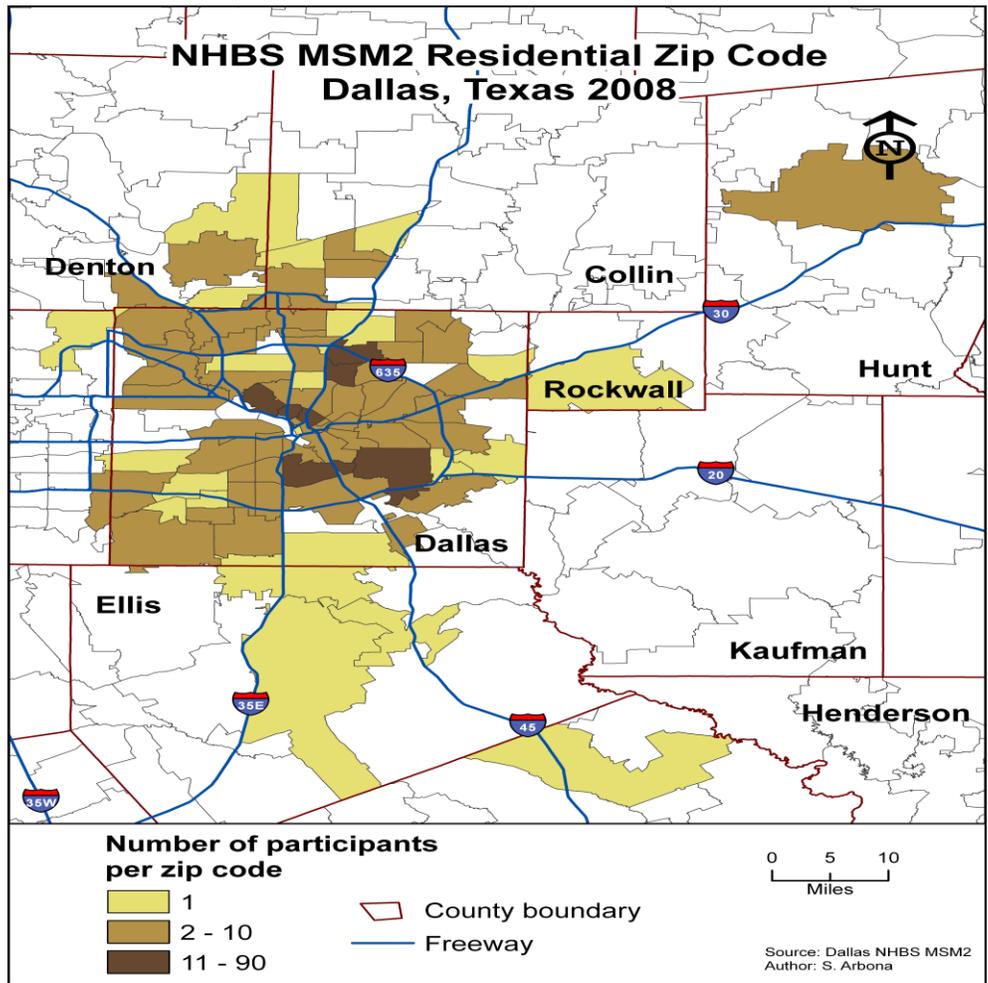
A total of 418 participants were included in the statistical figures that follow. Participants who self reported a positive HIV status (n=60) were excluded from the calculations because awareness of being HIV positive tends to make individuals alter their behavior so that it is less risky than the general at-risk population (Marks, et al., 2005). Additionally, although VBS methodology was used, no weighting was used in this analysis.

Residential Zip Code of MSM2 Participants

In 2008, the Texas NHBS MSM2 was conducted in the Dallas Metropolitan Division (Dallas MD) of the Dallas-Fort Worth Arlington Combined Metropolitan Statistical Area (DFWA CMSA). This is a change from the first MSM cycle in which the entire CMSA was included in the sampling eligibility.

Twenty percent of the participants resided in one zip code in the central Dallas County area. This zip code is in an area identified during the formative assessment process as one with high concentration of MSM and MSM-oriented businesses. Overall, most participants (41%) lived in zip codes in the central, south-east and north-east areas of Dallas County (Figure 2).

Figure 2. Residential Zip Codes of Dallas NHBS MSM2 Participants, 2008



Source: Texas Department of State Health Services, NHBS MSM2 Data, Dallas Metropolitan Division, 2008.

DEMOGRAPHIC CHARACTERISTICS OF MSM2 PARTICIPANTS

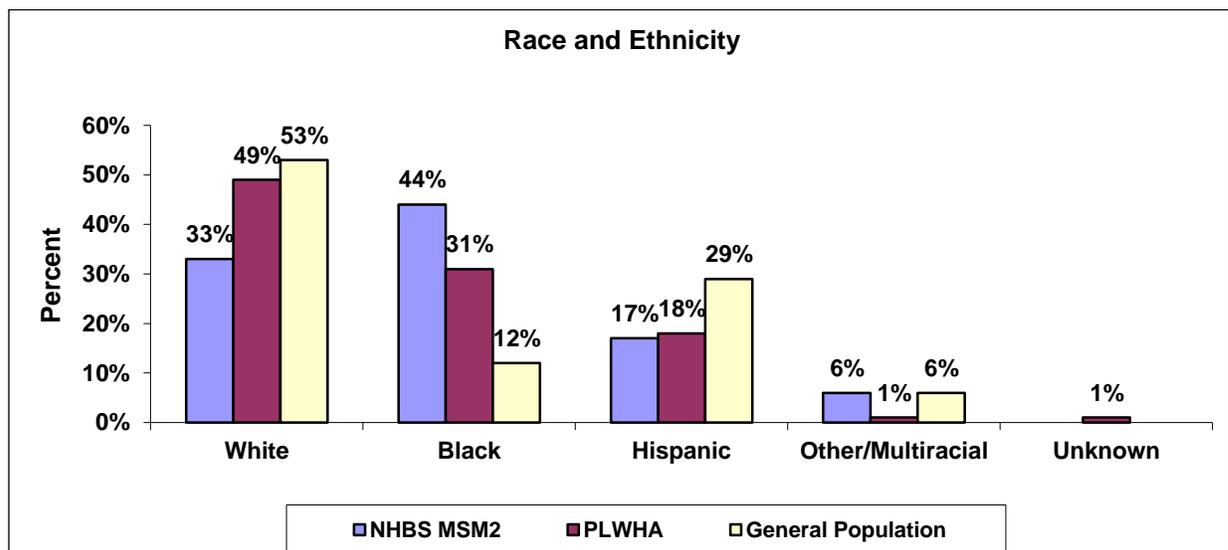
Race and Ethnicity

Among all the MSM in the United States in 2006, the White population group accounted for nearly half of the new infections (Centers for Disease Control and Prevention, 2010a). The national NHBS MSM2 conducted in 2008, which included the Dallas NHBS, found a race/ethnicity distribution where 28% of Black MSM were HIV-infected, compared to 18% of Hispanic MSM and 16% of White MSM (MMWR, 2010).

The 2008 rate of People Living with HIV/AIDS (PLWHA) in Texas shows an uneven burden of disease. Black persons had the highest rate (850/100,000). This rate was more than four times higher than the rate in White persons (197/100,000) and Hispanic persons (174/100,000). The most common exposure group was MSM (54%) (Texas DSHS, 2010).

Within the Dallas Metropolitan Division in 2008, and among the most common racial and ethnic groups in Texas, more than half of the estimated general population 18 years of age and older was White, followed by Hispanic and Black (Figure 3). PLWHA in the Dallas Metropolitan Division were also predominantly White but the second largest group was Black. Participants in the Dallas NHBS MSM2 had a different composition with Black as the largest population group, followed by White and Hispanic.

Figure 3. Estimated General Population, People Living with HIV/AIDS, and the Dallas MSM2 Sample in the Dallas Metropolitan Division by Race and Ethnicity, 2008



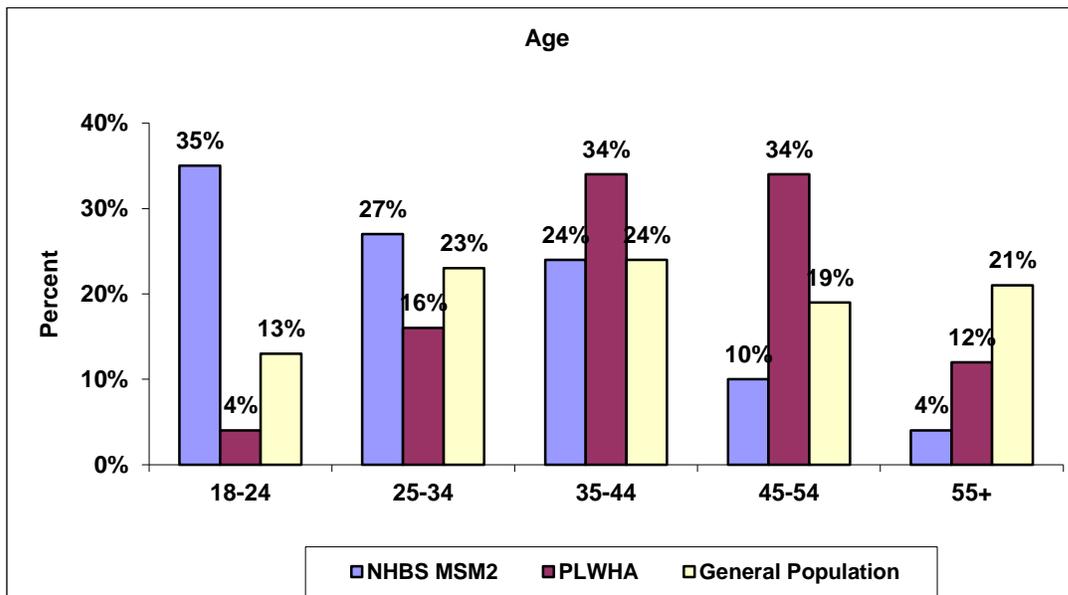
Sources: Texas Population Data Detailed Data (online), <http://www.dshs.state.tx.us/chs/popdat/detailX.shtm>, San Antonio, TX: Texas State Data Center and Office of the State Demographer, Institute for Demographic and Socioeconomic Research, The University of Texas at San Antonio, September 16, 2011. Enhanced HIV/AIDS Reporting System (eHARS), September 9, 2011. Texas Department of State Health Services, NHBS MSM2 Data, Dallas Metropolitan Division, 2008.

Age

At the national level from 2006 through 2009, the largest estimated numbers of HIV infection diagnoses were seen among MSM aged 25–34 years and 35–44 years. The number of diagnoses among MSM aged 25–34 years increased 17% from 2006 through 2009, and surpassed the decreasing number of diagnoses among MSM aged 35–44 for the first time in 2008. MSM aged 13–24 had the greatest percentage increase (53%) in diagnoses of HIV infection from 2006 through 2009 and exceeded the number of diagnoses among those aged 35–44 by 2009 (Centers for Disease Control and Prevention, 2011a).

In Texas the age distribution of PLWHA from 2002 to 2008 continued to shift to those over the age of 45, reflecting the aging infected population. PLWHA in the Dallas Metropolitan Division were predominantly within the 35 to 54 age group. Participants in the Dallas NHBS MSM2 were younger than both, the PLWHA in the Dallas Metropolitan Division and the estimated general population in the Dallas Metropolitan Division in 2008. Thirty-five percent of the NHBS MSM2 sample was 18 to 24 years age and only 4% was 55 and older (Figure 4).

Figure 4. Estimated General Population, People Living with HIV/AIDS, and Dallas NHBS MSM2 Sample in the Dallas Metropolitan Division, by Age, 2008



Sources: Texas Population Data Detailed Data (online), <http://www.dshs.state.tx.us/chs/popdat/detailX.shtml>, San Antonio, TX: Texas State Data Center and Office of the State Demographer, Institute for Demographic and Socioeconomic Research, The University of Texas at San Antonio, September 16, 2011. Enhanced HIV/AIDS Reporting System (eHARS), September 9, 2011. Texas Department of State Health Services, NHBS MSM2 Data, Dallas Metropolitan Division, 2008.

Other Socio-Economic Characteristics

Participants in the MSM2 survey represent a wide spectrum of socioeconomic strata, but overall did not show indicators of extreme poverty. More than half of the sample had a college degree or higher, most participants were employed and 31% earned \$40,000 or more annually (Table 1).

Homelessness may increase the risk of contracting HIV. Many homeless people suffer from substance abuse disorders and inject drugs intravenously and may share or reuse needles. These behaviors are responsible for 13% of HIV diagnoses in the United States (National Coalition for the Homeless, 2009). A 2000 study by Columbia University illustrated the fact that the greatest need for individuals with HIV after medication was stable housing (Help USA, 2009).

Table 1. Education, Income, Employment Status and Homelessness among Men who Have Sex with Men in the Dallas Metropolitan Division, 2008 (N=418)

Characteristic	Frequency	Estimate
Education Level		
Less than high school	49	11.7%
High School/GED	125	29.9%
Some college	151	36.1%
College grad/post grad	93	22.3%
Annual Household Income		
\$0-\$4999	59	14.1%
\$5,000-\$14,999	80	19.1%
\$15,000-\$29,999	94	22.5%
\$30,000-\$49,999	104	24.9%
\$50,000+	81	19.4%
Employment Status		
Unemployed	84	20.1%
Employed full or part time	285	68.2%
Other	49	11.7%
Homelessness*		
Currently homeless	28	6.7%
Ever been homeless	74	17.7%

Source: Texas Department of State Health Services, NHBS MSM2 Data, Dallas Metropolitan Division, 2008.

*As these questions were asked independently, the denominators vary slightly; 460 and 461 respectively.

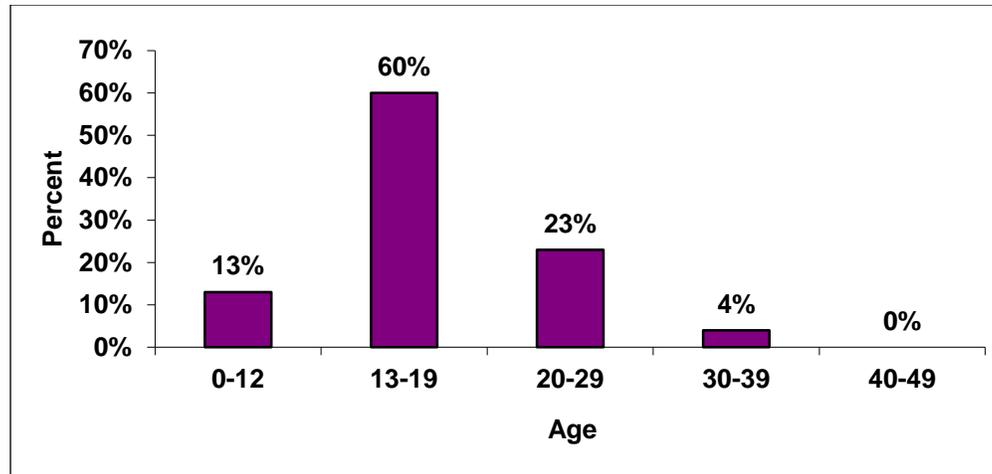
SEXUAL BEHAVIORS AND RISK FACTORS

Age at First Sexual Experience and Number of Sexual Partners

Sexual behavior is paramount in the exploration of attitudes, actions and activities that may lead to HIV infection in the MSM population. Fifty four percent of people in Texas living with HIV at the end of 2009 were infected through male to male sexual contact (Texas Department of State Health Services, 2010). The statistics describing MSM sexual

debut are what one would expect from most populations regardless of sexual identity or preference; a bell curve, but slightly shifted younger as compared to national statistics (Centers for Disease Control and Prevention, 2010a). The majority of MSM2 participants, 60%, had their first sexual experience with a man during adolescence at ages 13-19, followed by 23% at the ages of 20-29 (Figure 5). Fifty-four individuals (13%) had engaged in oral or anal sex with a man before the age of 13.

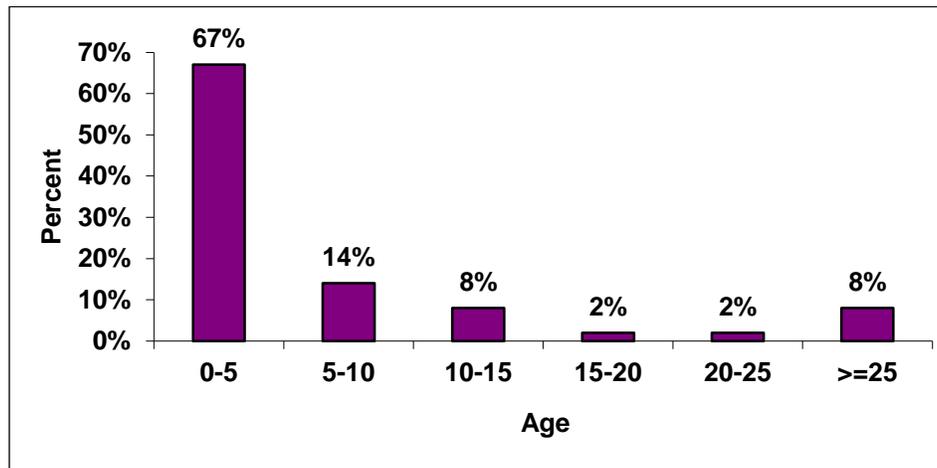
Figure 5. Age of NHBS MSM2 Participants at 1st Oral or Anal Sex with a Man (N=418)



Source: Texas Department of State Health Services, NHBS MSM2 Data, Dallas Metropolitan Division, 2008.

Having a large number of casual male sex partners has long been identified as one of the most important risk factors in the transmission of HIV (Jaffe, 1983). In a 2006 report from the EXPLORE study, researchers found that having four or more sex partners within a six month period was the leading behavioral factor that contributed to HIV incidence, with an attributable risk of 32.3% (Koblin, 2006). Of the MSM2 study participants, two thirds had 5 or fewer sexual partners over the past 12 months; then the numbers drastically dropped off with 14% (n=60) having 5-10 partners, 8% (n=32) with 10-15 partners and 8% (n=29) with 25 or more partners (Figure 6).

Figure 6. Number of Male Sexual Partners Reported by NHBS MSM2 Participants in the Past 12 Months (N=418)



Source: Texas Department of State Health Services, NHBS MSM2 Data, Dallas Metropolitan Division, 2008.

Unprotected Anal Sex, Partner HIV Status, Concurrent Sex Partners, and Impact of Social Media

According to the CDC, in 2009, an estimated 74% (24,132) of all diagnosed HIV infections among adult and adolescent males were attributed to male-to-male sexual contact (Centers for Disease Control and Prevention, 2009).

Unprotected anal sex among main partners in the past 12 months was reported by 61% of MSM2 survey participants. Forty six percent of participants reported having unprotected anal sex with a casual partner and the same percentage reported unprotected anal sex with an exchange partner (a partner with whom money or drugs are exchanged for sex). Thirty eight percent of participants said they had not discussed HIV status with their main partner in the last 12 months and 56% had not discussed HIV status with their casual partners. Only 25% of those engaging in exchange sex discussed HIV status with their partner in the last 12 months. Of all MSM surveyed, over half (55%) reported knowing the HIV status of their partner in the past 12 months.

Regarding concurrent sex partners, approximately half of the participants (49%) admitted to at least one concurrent sex partner aside from their last sex partner and 58% of participants stated their last sex partner had either “probably” or “definitely” had sex with someone else in the past 12 months. Thirty percent of MSM participating in this study visited locations where gay men congregate (e.g. gay bars, bath houses, etc.) more than once a week and 18% visited these locations once a week. Thirty one percent of MSM participating in this study used the Internet to look for sex in the past 12 months.

ALCOHOL AND DRUG USE BEHAVIORS

MSM Drug Use

According to the Texas Integrated Epidemiologic Profile for HIV/AIDS Prevention and Services Planning, HIV infection in MSM represents an overwhelming 54% of reported cases in Texas. Moreover, MSM using injection drugs represented 7% of Texans living with HIV at the end of 2008 (Texas Department of State Health Services 2010). The sharing of needles and paraphernalia has been widely recognized as a high risk behavior. In addition to the direct relationship between injection drug use and HIV infection, drug abuse plays other roles in HIV transmission. Drug use may affect user judgment and reasoning, which may lead to an increase in the likelihood of engaging in high risk sexual behavior. It is important to determine what drugs, both injection and non-injection, are most commonly used by MSM in order to develop targeted interventions.

Overall, only 9% of MSM participants reported using injection drug in the past year, with powdered cocaine as the most commonly used drug followed by crystal meth. Participants who admitted injection drug use first used between the ages of 13-19 years old (36%). This was followed closely by ages 20-29 years old which represented one third of participants. Five percent of the MSM2 population first used injection drugs under the age of 12.

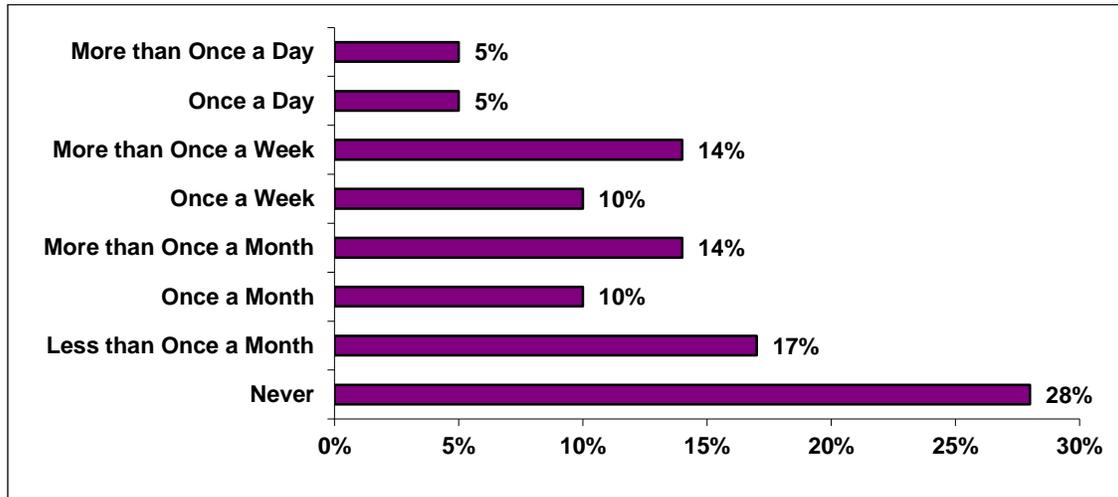
The prevalence of non-injection drug use among MSM was higher than injection drug use, at 50%. The most commonly used non-injection drug was marijuana, with 81% reporting use followed by powdered cocaine with 41% reporting use. Other drugs used by MSM participants include crack cocaine and ecstasy with each reporting 26% use, amyl nitrate (poppers) with 20% reporting use, and crystal meth with 19% reporting use.

MSM Alcohol Use

As with drug use, alcohol use may affect the judgment and mental faculties of an individual, which may lead to an increased likelihood of engaging in high risk sexual behavior (Lane, 2004). Also, the physiological consequences of alcohol abuse may lower the immune response and interfere with HIV treatment drugs.

Five or more drinks at one time are an accepted marker of binge drinking. Binge drinking has independently been shown to influence sexual decision making, and undermine skills for condom negotiation and correct condom use (Chersich, 2010). Among MSM study participants, 28% did not engage in binge drinking and 72% did engage in binge drinking. Of those who engaged in binge drinking, the most common self reported frequency was less than once a month for 17% of the participants interviewed (Figure 7). This was closely followed by a binge drinking frequency of greater than once a week and greater than once a month, respectively (both with 14%).

Figure 7. How Often MSM Had 5+ Alcoholic Drinks at One Time over the Past 12 Months (N=418)

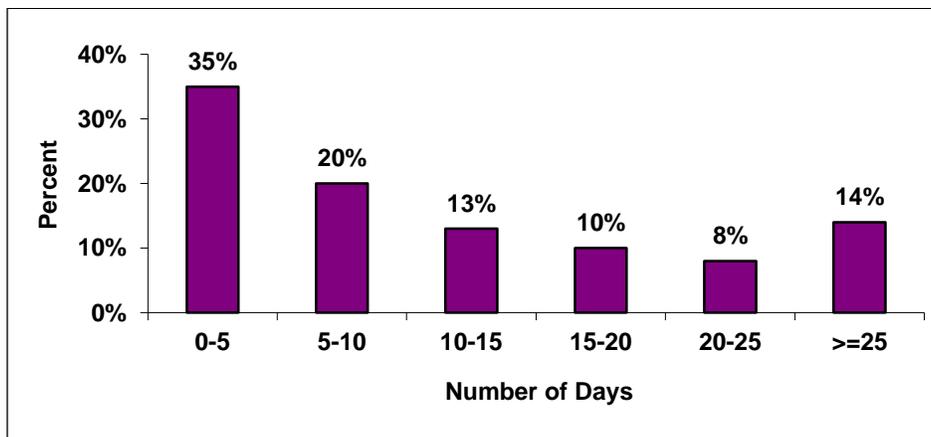


Source: Texas Department of State Health Services, NHBS MSM2 Data, Dallas Metropolitan Division, 2008.

Days of alcohol use in the past 30 days is another good marker for alcohol abuse. CDC’s 2010 Binge Drinking Fact Sheet defines heavy drinking in males as “drinking more than two drinks per day on average” or 60 or more drinks in the past 30 days (Centers for Disease Control and Prevention, 2010b). According to the Behavioral Risk Factor Surveillance System (BRFSS) survey, more than half of the adult U.S. population drank alcohol in the past 30 days; approximately 5% drank heavily, while 15% engaged in binge drinking.

MSM responses showed a slightly elevated rate (compared to BRFSS) in heavy drinking and binge drinking. Over 65% of participants reported drinking on more than five days per month. One in seven participants (14%) reported drinking in excess of 25 days in the last 30 days (Figure 8).

Figure 8. Alcohol Use in the Past 30 Days among MSM (N=418)



Source: Texas Department of State Health Services, NHBS MSM2 Data, Dallas Metropolitan Division, 2008.

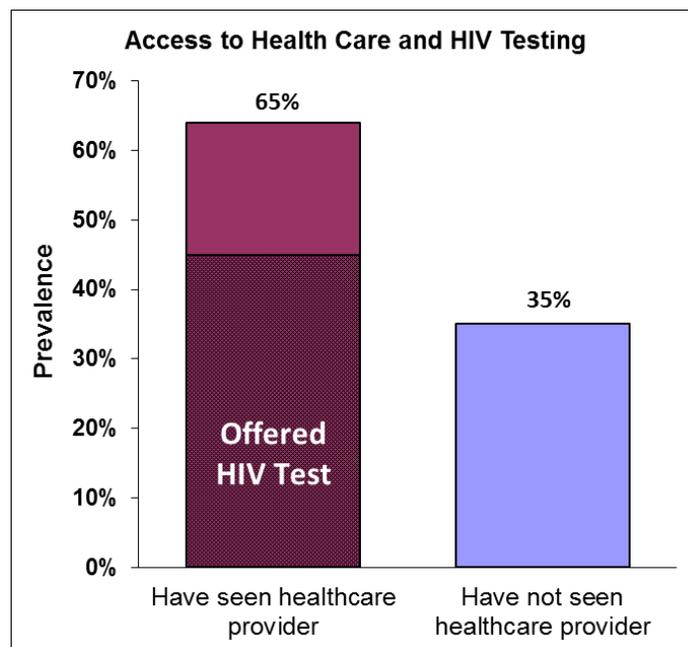
Of 418 participants, 45% reported using drugs, alcohol or a combination of the two before or during their last sexual encounter. One quarter used alcohol, 7% used drugs and 13% used both alcohol and drugs. One fifth of the participants reported ever participating in a drug or alcohol treatment programs and nearly one-tenth (9%) reported participation within the last year.

ACCESS TO HEALTH CARE

The CDC sexually transmitted disease (STD) treatment guidelines recommend that MSM who have multiple or anonymous partners, have sex in conjunction with illicit drug use, use methamphetamine, or whose sex partners participate in these activities, be screened for STDs and HIV every three to six months (Centers for Disease Control and Prevention, 2011b).

Almost two-thirds of the participants in the survey had access to health care, as indicated by having visited a health care provider during the 12 months prior to the interview. Less than a fifth of these individuals (20%) reported not being offered an HIV test (Figure 9).

Figure 9. Access to Health Care and HIV Testing among MSM in the Past 12 Months (N=418)



Source: Texas Department of State Health Services, NHBS MSM2 Data, Dallas Metropolitan Division, 2008.

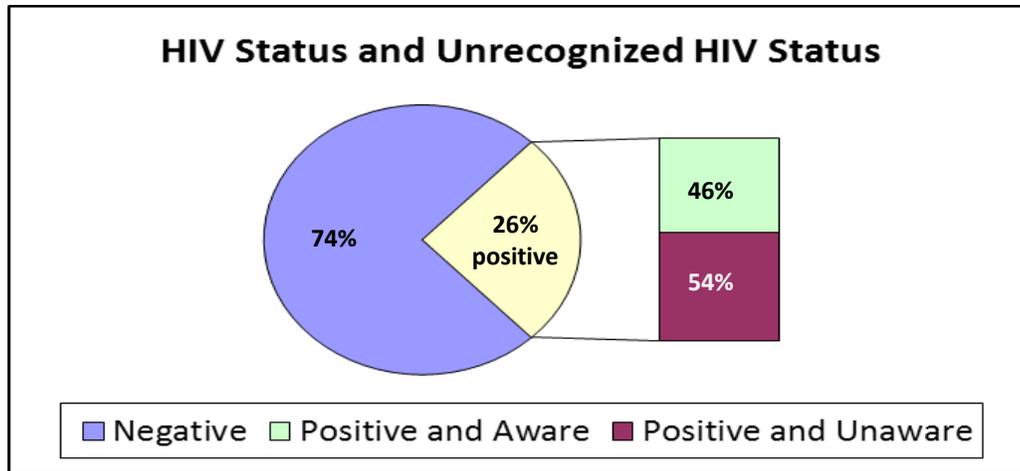
Awareness of HIV Status

Many MSM with HIV are unaware of their HIV infection, especially MSM of color and young MSM. Low awareness of HIV status among young MSM likely reflects several factors: they may have been infected more recently, may underestimate their personal

risk, may have had fewer opportunities to get tested, or may believe that HIV treatment minimizes the threat of HIV (Centers for Disease Control and Prevention, 2010c).

Four hundred and sixty-one Dallas NHBS MSM2 participants were tested for HIV and 26% (n=119) tested positive. Among the 119 positive persons, 54% (n=64) were unaware of their HIV positive status (Figure 10).

Figure 10. HIV Status and Awareness of HIV Status among MSM2 Participants

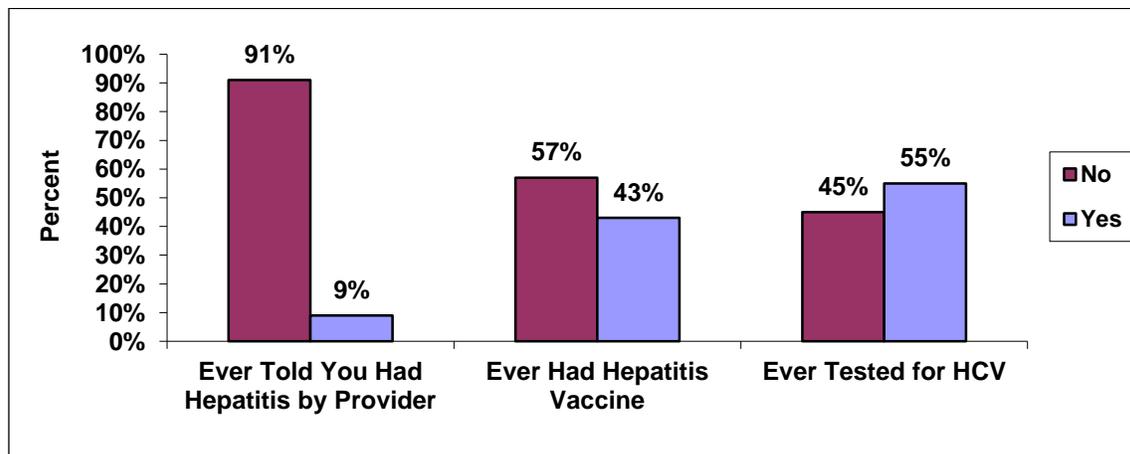


Source: Texas Department of State Health Services, NHBS MSM2 Data, Dallas Metropolitan Division, 2008.

HEALTH CONDITIONS

Regarding hepatitis testing among MSM, 55% of the participants who answered this question had ever been tested for the hepatitis C virus (Figure 11). Nine percent of MSM reported having ever been diagnosed with hepatitis and 43% had received a hepatitis vaccine at some point in time.

Figure 11. Hepatitis Testing and Vaccination among MSM (N=418)



Source: Texas Department of State Health Services, NHBS MSM2 Data, Dallas Metropolitan Division, 2008.

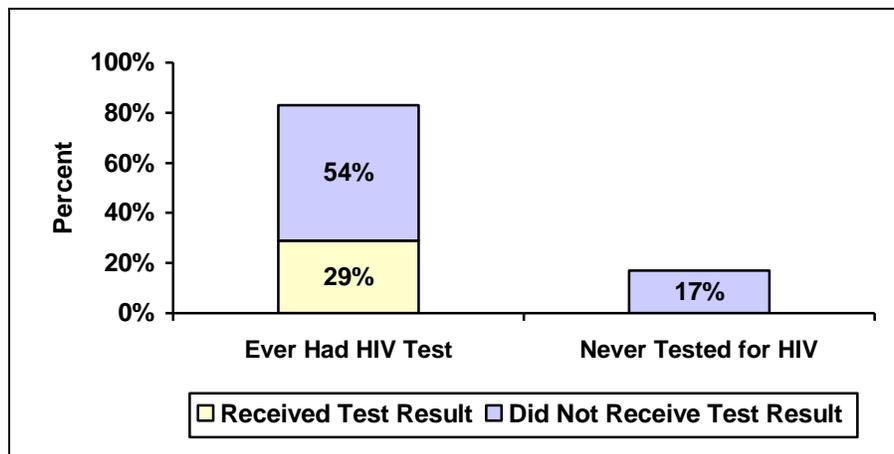
Of the 418 MSM who responded to the questions regarding the diagnosis of an STD in the 12 months prior to their interview date, 4% were diagnosed with syphilis and 4% were diagnosed with gonorrhea. Furthermore, 1% of respondents were diagnosed with herpes and HPV.

HIV TESTING EXPERIENCES

HIV testing is integral to HIV prevention, treatment, and care efforts. Testing provides an opportunity for people to receive counseling and information about risk reduction. Early knowledge of HIV status is also important for linking HIV positive individuals to medical care and services that can reduce morbidity and mortality and improve quality of life.

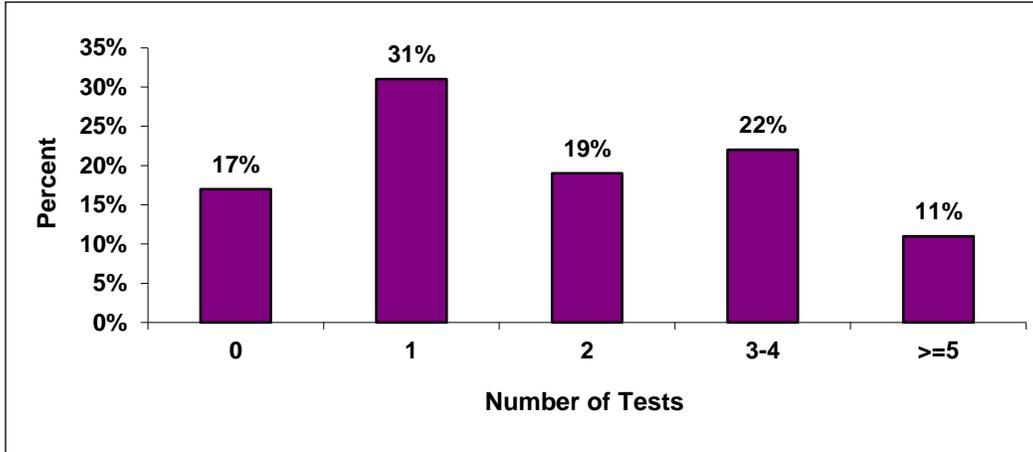
Among MSM participating in this study, 83% reported having ever been tested for HIV and 17% had never tested for HIV (Figure 12). Of MSM tested, over half (54%) did not receive their test results. Regarding the number of HIV tests done in the past two years, 31% had at least one test and 22% had three to four tests (Figure 13).

Figure 12. HIV Testing Experience among MSM (N=418)



Source: Texas Department of State Health Services, NHBS MSM2 Data, Dallas Metropolitan Division, 2008.

Figure 13. Number of HIV Tests in Past 2 Years (N=418)

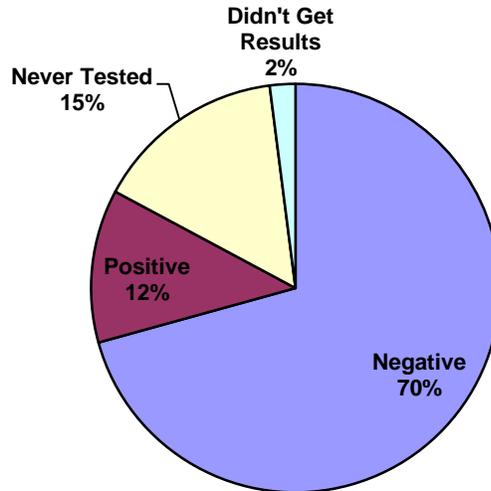


Source: Texas Department of State Health Services, NHBS MSM2 Data, Dallas Metropolitan Division, 2008.

Recent HIV Test Characteristics

Among MSM reporting a recent HIV test, 27% had an anonymous HIV test and 21% had a rapid HIV test. Regarding the most recent HIV test results reported by MSM, 70% were negative and 12% were self-reported positive (Figure 14).

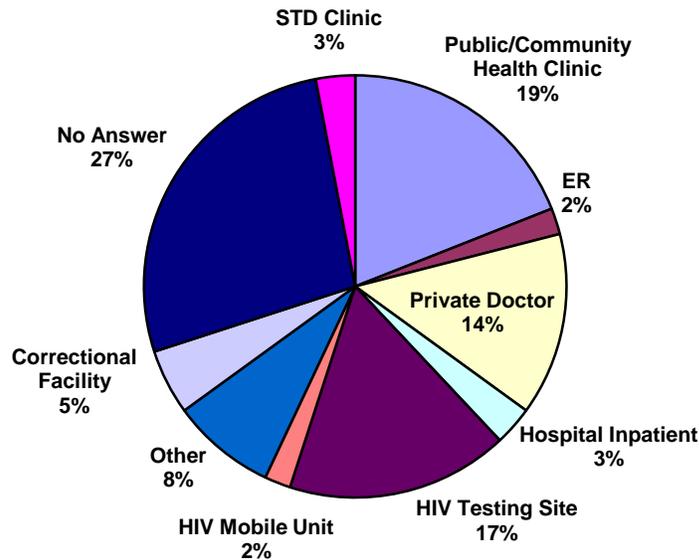
Figure 14. Most Recent HIV Test Result (N=418)



Source: Texas Department of State Health Services, NHBS MSM2 Data, Dallas Metropolitan Division, 2008.

MSM tested for HIV at a variety of locations, as illustrated in Figure 15. Nineteen percent of MSM tested at a public or community health clinic, 17% at an HIV testing site and 14% at a private doctor office.

Figure 15. HIV Testing Locations in the Past 12 Months (N=418)



Source: Texas Department of State Health Services, NHBS MSM2 Data, Dallas Metropolitan Division, 2008.

Among MSM who had an HIV test in the past 12 months, 40% said the reason they tested was because they wanted to make sure they were HIV negative, 29% tested on a regular basis, 20% were worried about being recently exposed to HIV, 8% gave other reasons and 3% tested because it was required.

HIV PREVENTION ACTIVITIES

Agencies and programs that provide HIV testing and education are vital to preventing the spread of HIV. HIV prevention activities usually focus on three areas: behavioral interventions, HIV testing, and linkage to treatment and care.

Of 418 MSM who answered questions about HIV prevention activities, 57% did not receive free condoms, 91% did not receive individual HIV counseling and 98% did not participate in a formal group discussion regarding HIV prevention. Of the 42% who received free condoms, 16% did not use them.

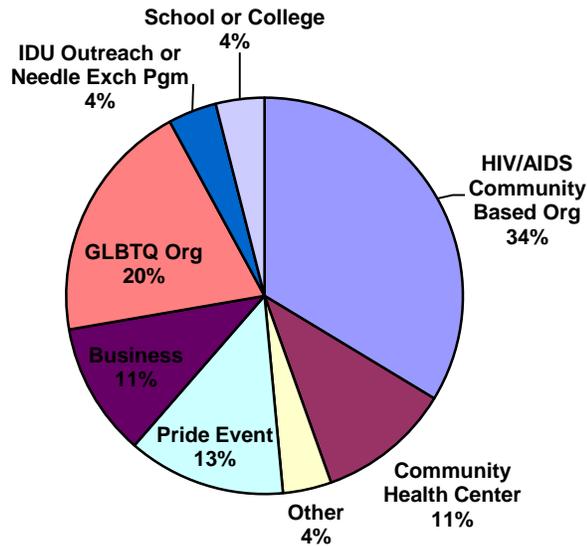
Free Condoms: Method of Acquisition

The majority of MSM (61%) reported that someone gave them free condoms, 30% reported picking up free condoms from an agency and 9% reported obtaining free condoms from an individual and from an agency in the past 12 months.

At least half of the MSM who obtained free condoms from someone received them from individuals who worked at either an HIV/AIDS community based organization (34%) or a GLBTQ (gay, lesbian, bisexual, transgender, or queer) organization (20%). One third of

MSM obtained free condoms from someone who worked at a community health organization, pride event or a local business (Figure 16).

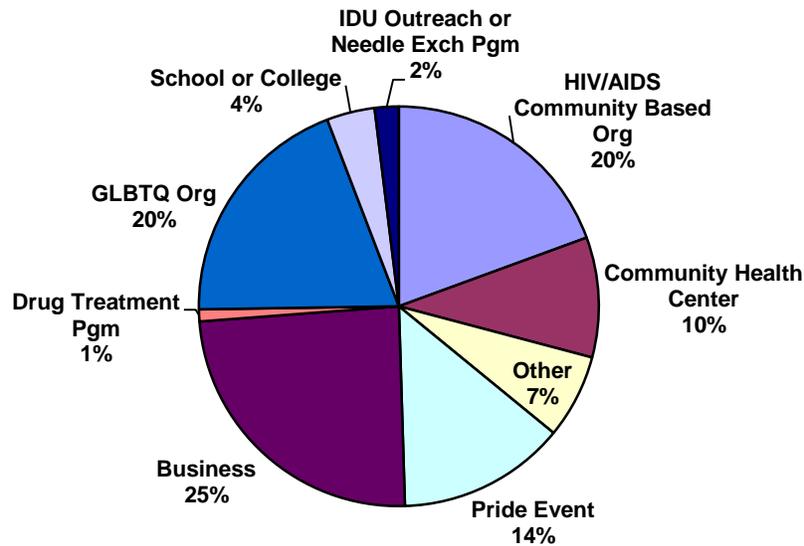
Figure 16. Type of Agency Where MSM Obtained Free Condoms from an Individual in the Past 12 Months: Not Mutually Exclusive (N=418)



Source: Texas Department of State Health Services, NHBS MSM2 Data, Dallas Metropolitan Division, 2008.

Twenty five percent of MSM that picked up their own condoms had obtained free condoms directly from a business, 20% got them from an HIV/AIDS community based organization and 14% got them from a pride event (Figure 17).

Figure 17. Locations Where Participants Obtained Free Condoms in the Past 12 Months: Not Mutually Exclusive (N=418)



Source: Texas Department of State Health Services, NHBS MSM2 Data, Dallas Metropolitan Division, 2008.

Individual and Group HIV Counseling

Of MSM who received individual HIV counseling in the 12 months preceding the interview, 44% received counseling from a HIV/AIDS community based organization, 20% from a community health center, and 20% from a GLBTQ organization. Other individual counseling locations included school or college, pride events, local businesses or drug treatment programs.

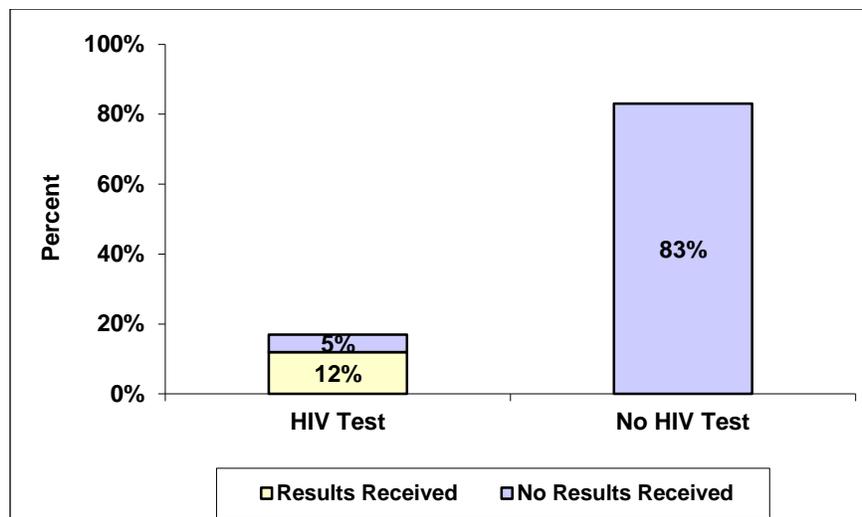
Of MSM who received group HIV counseling in the 12 months preceding the interview, 24% received counseling from a community health center, 24% from a GLBTQ organization and 14% from a HIV/AIDS community based organization. Other group counseling locations included local businesses, school or college, drug treatment programs and pride events.

INCARCERATION

According to an article from AIDS Action, although the majority of HIV-positive prisoners are infected prior to entering jails and prisons, individuals who are not HIV-positive at intake may be at increased risk of contracting HIV from participating in activities that can lead to HIV infection, such as continued injecting drug use, tattooing, and consensual sexual activity (AIDS Action, 2001). For this NHBS cycle, MSM were asked about their arrest history, HIV and hepatitis C testing during last incarceration, and receipt of test results.

Among MSM who answered question about arrest history, 25% reported being arrested in the past 12 months. Regarding incarceration at last arrest, 10% (n=41) were detained for only one day and 7% (n=62) for a longer stay. Of MSM incarcerated for more than one day, 83% reported not receiving a HIV test at last time in jail, while nearly one in five reported receiving an HIV test at last time in jail (Figure 18). This may have implications for HIV positive individuals who may be unaware of their status while being detained in a high risk environment with male to male sexual activity, tattooing without sterile equipment, and shared injection equipment. This may, in fact, pose a greater risk of HIV transmission among inmates. Among those MSM incarcerated for more than one day and who had received a HIV test, 5% did not receive their test result (Figure 18).

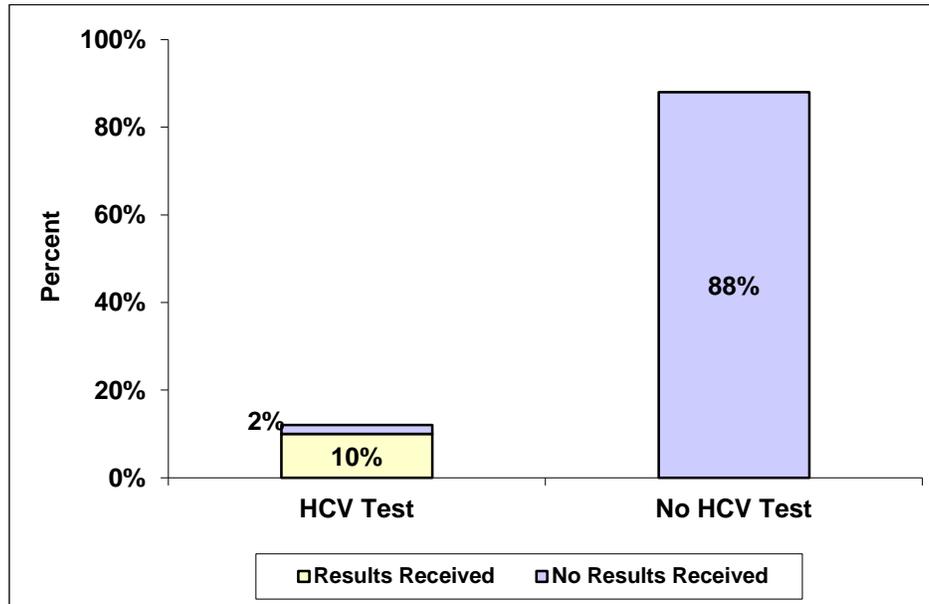
Figure 18. HIV Testing and Results Received at Last Incarceration among MSM (N=103)



Source: Texas Department of State Health Services, NHBS MSM2 Data, Dallas Metropolitan Division, 2008.

Among participants who reported being incarcerated, 88% (n=90) reported not being tested for HCV during the last incarceration (Figure 19). Of the 12% of MSM who were tested for HCV, 2% did not receive their test results. Although the risk of becoming infected with hepatitis C through sexual contact is lower than contracting HIV, individuals incarcerated for long periods of time who engage in risky sexual behaviors should also be tested for hepatitis C as the disease is asymptomatic and can be more serious in individuals who are already HIV positive (Centers for Disease Control and Prevention, 2007).

Figure 19. HCV Testing and Results Received at Last Incarceration among MSM (N=102)



Source: Texas Department of State Health Services, NHBS MSM2 Data, Dallas Metropolitan Division, 2008.

LIMITATIONS

Data are self-reported and thus may be subject to certain biases. Because participants were asked about sexual or drug-use behaviors that may be interpreted as undesirable, the MSM2 data are prone to social desirability bias (Gallagher et al., 2007). Social desirability bias is described as the tendency of individuals to say things that will make them look good (Cohen, 2008). However, because the interview is anonymous and participants are assured that their responses will be kept confidential; this bias most likely has a minimal impact on the study findings. Participants had to remember past behaviors to answer interview questions; therefore, recall bias may affect study results since the quality and completeness of the data collected is limited by participants' ability to correctly recall certain facts and details.

Furthermore, given the sensitive nature of this study, positive HIV status may be underreported due to the fact that an interviewer directly asks the participant questions related to HIV risk behaviors. This method of questioning can lead to inflated estimates of individuals who are unaware of his/her HIV infection. There may be underreporting in the areas of drug use and sexual behaviors (especially among non-gay identified MSM) due to stigma associated with engaging in risky behaviors or being infected with HIV. In addition, the data is a snapshot of risky behaviors among men who have sex with men in the Dallas County population who attended venues and cannot be generalized beyond this population.

REFERENCES

- AIDS Action. Incarcerated Populations and HIV/AIDS. 2001.
Available at: <http://img.thebody.com/legacyAssets/37/72/incarcerated.pdf>
- Centers for Disease Control and Prevention. 2007. Coinfection with HIV and Hepatitis C Virus. Available at: <http://www.cdc.gov/hiv/resources/factsheets/coinfection.htm>
- Centers for Disease Control and Prevention. 2008. Behavioral Surveillance Team. National HIV Behavioral Surveillance System: Men Who Have Sex with Men (NHBS-MSM2): Formative Research Manual
- Centers for Disease Control and Prevention. 2009. HIV/AIDS Surveillance Report. Available at: <http://www.cdc.gov/hiv/stats/hasrlink.htm>
- Centers for Disease Control and Prevention. 2010a. HIV among Gay, Bisexual and Other Men Who Have Sex with Men (MSM). Available at:
<http://www.cdc.gov/hiv/topics/msm/pdf/msm.pdf>
- Centers for Disease Control and Prevention. 2010b. Binge Drinking Fact Sheet. Available at: <http://www.cdc.gov/alcohol/fact-sheets/binge-drinking.htm>
- Centers for Disease Control and Prevention. 2010c. Prevalence and Awareness of HIV Infection among Men Who Have Sex With Men - 21 Cities, United States, 2008. Available at: <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5937a2.htm>
- Centers for Disease Control and Prevention. 2011a. Diagnoses of HIV Infection among Men Who Have Sex with Men, by Age Group, 2006-2009 - 40 States and 5 U.S. Dependent Areas. Available at:
<http://www.cdc.gov/hiv/topics/surveillance/resources/slides/msm/slides/msm7.pdf>
- Centers for Disease Control and Prevention. 2011b. HIV Testing among Men Who Have Sex with Men - 21 Cities, United States, 2008. Available at:
<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6021a3.html>
- Chersich MF, Rees HV, et al.: Causal links between binge drinking patterns, unsafe sex and HIV in South Africa: its time to intervene. *Int. Journal of STD AIDS* 2010, Jan 21 (1) 2-7.
- Cohen E. 2008. Research Methods and Design - Measurement. Available at:
<http://www.sjsu.edu/people/edward.cohen/courses/298/s6/Week%204%20handout%20Measurement.pdf>
- DiNenno EA. Characterizing HIV Risk Behaviors: CDC's National HIV Behavioral Surveillance System. 17th Annual HIV/STD Conference, Austin, TX, May 26, 2010.

Gallagher KM, Sullivan PS, Lansky A, Onorato IM. Behavioral surveillance among people at risk for HIV infection in the US: the National HIV Behavioral Surveillance system. *Public Health Reports*. 2007; 122 (Suppl I) 32-38. Help USA. 2009. HIV/AIDS Services. Available at: http://helpusa.org/Programs/HIV_AIDS_services

Jaffe HW, Choi K, Thomas PA, *et al.*: National case-control study of Kaposi's sarcoma and Pneumocystis carinii pneumonia in homosexual men: Part 1. Epidemiologic results. *Ann Intern Med* 1983, 99:145-151.

Koblin BA, Husnik MJ, Colfax G, Huang Y, *et al.*: Risk factors for HIV infection among men who have sex with men. *AIDS* 2006, 20:731-739.

Lane SD, Cherek DR, Pietras CJ, Tcheremissine OV. Alcohol effects on human risk taking. *Psychopharmacology* 2004, 172(1):68-77.

Marks G, Crepaz N, Senterfitt JW, Janssen RS. Meta-analysis of high-risk sexual behavior in persons aware and unaware they are infected with HIV in the United States: implications for HIV prevention programs. *J Acquir Immune Defic Syndr*. 2005; 39(4):446-453.

Muhib FB, Lin LS, Stueve A, Miller RL, Ford WL, Johnson WD, Smith PJ. A venue-based method for sampling hard-to-reach populations. 2001; 116:216-22.

National Coalition for the Homeless. 2009. HIV/AIDS and Homelessness. Available at: <http://www.nationalhomeless.org/factsheets/hiv.html>

“Prevalence and Awareness of HIV Infection among Men Who Have Sex with Men --- 21 Cities, United States, 2008”. *MMWR* 2010, 59(37); 1201-1207. Retrieved from <http://www.cdc.gov/mmwr/>

Texas Department of State Health Services. 2010. 2010 Texas Integrated Epidemiologic Profile for HIV/AIDS Prevention and Services Planning: HIV/AIDS in Texas, 2010. Available at: www.dshs.state.tx.us/hivstd/reports/HIVandAIDSinTexas.pdf