

HEALTHY CHICAGO

TRANSFORMING THE HEALTH OF OUR CITY

Chicago Department of Public Health

HIV Risk and Prevention Behaviors Among Men Who Have Sex with Men, Chicago, 2008 and 2011

December 2012



Chicago Department of Public Health
www.cityofchicago.org/health



SUGGESTED CITATION:

Chicago Department of Public Health. HIV Risk and Prevention Behaviors Among Men Who Have Sex With Men, Chicago, 2008 and 2011. Chicago, IL: City of Chicago; December 2012.

REPORTED BY:

Nikhil Prachand, MPH, Katelynne Finnegan, MPH, and Nanette Benbow, MAS, Chicago Department of Public Health, HIV/STI Surveillance, Epidemiology and Research

ACKNOWLEDGMENTS:

For their contributions to the preparation of this report, the authors would like to thank the following:

Thomas Clyde, Edgar Gutierrez, Melissa Zeilner, Alfonso Urquidi, MPA, David Amarathithada, MPH, Randal Buffington, Pamela McCann, MA, Corinne Blum MD, AAHIVS, Chicago Department of Public Health and Amanda Smith, MPH, Centers for Disease Control and Prevention

Special Thanks to members of our data collection teams, survey participants and the hundreds of community collaborators who supported our efforts.

Additional HIV Behavioral Surveillance Reports and Slide Sets are available at:

http://www.cityofchicago.org/city/en/depts/cdph/supp_info/info_stats_reports/project_chat_-_nationalhivbehavioralsurveillancehbs.html

Table of Contents »

» Message from the Commissioner of Health	1
» Purpose of Report	2
» Data Highlights	3
» Background	5
» Methods	5
» Data Collection	6
» Data Analysis	7
» Core Indicators At-A-Glance	10
HIV Prevalence and Awareness of Infection	11
Behaviors of HIV-Positive MSM	14
» Demographics, Risk and Prevention Behaviors.	15
Demographics	16
Social Determinants.	18
Health Care	19
Sex Behaviors.	20
STI Testing and Diagnosis	22
Drug Use	23
HIV Testing and Prevention	24
» Special Focus: Black MSM in Chicago	25
» Limitations	35
» Discussion	35
» Public Health Response.	39
» References	41



Since 1982, the Chicago Department of Public Health has been actively monitoring the HIV/AIDS epidemic in Chicago. Today, our surveillance system collects and combines information on AIDS cases, clinical indicators, new HIV infections, and behaviors and characteristics of people at high risk. This system allows us to better integrate our efforts to help community partners and Chicagoans understand the HIV epidemic direct HIV prevention funding to where it is needed the most.

By combining surveillance and prevention efforts, we can more effectively work towards reducing the burden of disease in Chicago and enhance linkage-to-care efforts. While we have come a long way in the prevention and treatment of HIV and AIDS, there is still work to be done. Chicago is faced with the same challenges observed nationally, such as racial disparities and a younger population being affected by HIV.

This report provides a detailed picture of the HIV risk behaviors and HIV prevention utilization of men who have sex with men (MSM) and changes that may have occurred since 2008. MSM continue to be the population most affected by the HIV epidemic both locally and nationally. More recently, young Black MSM have emerged as the population facing the greatest burden of HIV disease. While we have seen steady declines in HIV diagnoses across all age groups and all risk populations in Chicago, Black MSM under the age of 30 are the only group currently experiencing annual increases in new HIV diagnoses.

This report highlights the societal characteristics that create barriers and also reveals improvements the community has made towards fighting the HIV epidemic. The good news is that since 2008, Black MSM are reporting greater HIV testing, greater knowledge of their own HIV status, more participation in HIV behavioral interventions and greater access to HIV antiretroviral therapies.

Using the Healthy Chicago Public Health Agenda and the LGBT Community Action Plan as blueprints, we are enhancing our efforts to track HIV, developing new prevention and treatment intervention strategies, reinvigorating our existing programs and services, and stepping up our policy initiatives to make structural changes to the existing service delivery systems throughout Chicago.

By 2015, our goal is to reduce the number of new reported cases of HIV by 25 percent. Together with our community partners, we will keep pushing towards the goal of an AIDS-free generation right here in Chicago.

Bechara Choucair, M.D.
Commissioner of Public Health

PURPOSE OF THIS REPORT

To assess sexual behaviors, drug use behaviors, health care and prevention utilization behaviors, and HIV prevalence among men who have sex with men (MSM), the Chicago Department of Public Health (CDPH) analyzed data from the National HIV Behavioral Surveillance (NHBS-Chicago) system in Chicago. This report summarizes findings from the 2008 and 2011 data collection cycles. This report aims to describe HIV risk and prevention behaviors and HIV prevalence of Chicago MSM by race/ethnicity and age and explore differences in rates between groups and between the two cycles of data collection, 2008 and 2011. This report includes a special section focused on 2011 core indicators among young Black MSM (under the age of 30 years).

HIV BEHAVIORAL SURVEILLANCE AND HEALTHY CHICAGO

The Chicago Department of Public Health created the Healthy Chicago agenda to serve as a focused, comprehensive approach to leading and working with partners to improve the health and well-being of Chicagoans (1). Healthy Chicago focuses on public health issues and strategies with measurable outcomes and is specifically designed to engage communities, partners, and other public health stakeholders in twelve priority areas. Several of these priority areas directly intersect with the work of the NHBS- Chicago: HIV Prevention, Access to Health Care and Communicable Disease Control and Prevention.

An important companion document to the Healthy Chicago agenda is the LGBT Community Action Plan (LGBT CAP), developed by CDPH in conjunction with health care providers, community based organizations, partners and stakeholders in the LGBT community (2). This action plan outlines strategies to address disparities in health status and health care access in the LGBT community. Among its twenty-two strategies the LGBT CAP emphasizes the specific need for behavioral surveillance among MSM in order to identify risk behaviors for HIV transmission. It also extends the scope of these surveillance studies to include sharing the findings with health care providers and researchers. The LGBT CAP addresses the need for collaborative efforts for research on LGBT health issues for the purpose of informing service delivery and prompting yet new LGBT health studies. Additionally, it recognizes that the development of linkage to care programs for HIV positive persons and enhanced HIV prevention and screening services targeting the LGBT community are critical.

This report provides data on HIV/STI risk behavior, testing, and prevention activities, with a special focus on young Black MSM. The study also provides data pointing to hopeful developments in the rates of unrecognized infection among MSM in Chicago. Both of these are critical to evaluating Health Chicago HIV Prevention strategies. These data will also drive continuing partnerships between LGBT community organizations and CDPH for HIV testing and prevention activities, a strategy of the LGBT CAP.

DATA HIGHLIGHTS

HIV Prevalence

- Overall, HIV prevalence among Chicago men who have sex with men (MSM) was 20.9% in 2011; up from 18.1% in 2008.
- Largest increases in HIV prevalence were observed among non-Hispanic White MSM (11.6% in 2008 to 16.8% in 2011) and non-Hispanic Black MSM (32.2% in 2008 to 35.1% in 2011). There was little change among Hispanic /Latino MSM (12.1% in 2008 to 12.5% in 2011).
- Among MSM youth (under 30 years of age) the only increase in HIV prevalence was observed among White MSM (1% in 2008 to 10% in 2011). No changes were observed in Black MSM youth (28% in both years) and a slight decrease was observed among Latino MSM youth (9% to 8%).

Awareness of HIV infection

- Substantial decreases were observed in numbers of HIV-positive MSM who were not aware of their HIV infection at the time of the survey. Overall, in 2008, 52% of HIV-positive MSM were unaware of their status, in 2011, less than one-quarter (22%) were unaware of their HIV infection. Decreases were seen among all race groups:

- Black MSM: 33% of those HIV-infected were not aware of their infection in 2011 compared to 67% in 2008.
- White MSM: 9% of those HIV-infected were not aware of their infection in 2011 compared to 23% in 2008.
- Hispanic MSM: 21% of those HIV-infected were not aware of their infection in 2011 compared to 50% in 2008.

DATA HIGHLIGHTS

HIV Testing

- The percentage for all MSM that report ever having had an HIV test in their lifetime has increased from 94% in 2008 to 99% in 2011.
- Overall, 65% of MSM met the CDC HIV testing guidelines (at least one HIV test annually) in 2011. This was similar to 64% reported by MSM in 2008.
- Changes in regular HIV testing (at least one test annually over the last two years) varied by race/ethnicity: Rates of annual HIV testing were slightly increased for Black MSM - 62% (2008) to 66% (2011); slightly decreased for Whites - 57% to 53%; and increased for Hispanic MSM - 53% to 56%.
- In 2011, 62% of Black and 57% of Hispanic MSM were offered an HIV test at their regular doctor visit compared to 44% of White MSM.
- In 2011, 71% of young Black MSM reported testing at least once in the past year, the highest rate of any MSM subgroup.

HIV Interventions

- 40% of Black MSM reported taking part in an Individual-Level HIV Prevention Intervention in the past year; this rate was more than three times higher than that for White MSM (12%) and almost double that of Hispanic MSM (22%).

HIV-Positive MSM

- HIV-positive Black MSM were much more likely to be offered partner services than White or Hispanic MSM (61% compared to 40% and 36%, respectively).
- Over one-third of HIV-positive Black and Latino MSM report that they had not been vaccinated for Hepatitis A or Hepatitis B infection.
- The percentage of HIV-positive MSM reporting being on HIV medications almost doubled among Black MSM, from 44% in 2008 to 84% in 2011. The proportion of White MSM reporting being on HIV medications increased from 90% in 2008 to 100% in 2011 and there was also a large change among Hispanic MSM, from 50% to 82%.

BACKGROUND

At the end of 2010, 21,208 people in Chicago were living with human immunodeficiency virus (HIV) infection, and 953 people were newly diagnosed with HIV infection in the same year. Among new HIV infections in 2010, approximately 69% were men who have sex with men (MSM), 19% were infected through heterosexual contact, 11% were injection-drug users (IDU), and 2% were both MSM and IDU (3). MSM remain the sub-population most impacted by the Chicago HIV epidemic.

The National HIV Behavioral Surveillance (NHBS) System was designed to help the Chicago Department of Public Health (CDPH) and 20 other state and local health departments in areas with high AIDS prevalence monitor selected risk behaviors, HIV testing experiences, use of prevention programs, and HIV prevalence in three populations at high risk for HIV infection: MSM, injection-drug users, and heterosexual adults at increased risk (4). NHBS is the primary source of data for monitoring behaviors among populations at risk for HIV infection in Chicago. The behavioral data collected through NHBS along with seroprevalence data help characterize the epidemic among these populations. Findings from NHBS enhance the understanding of HIV risk and testing behaviors and identify gaps in prevention efforts. NHBS data are used by CDPH to renew and maintain efforts to prevent HIV infection. Thus, NHBS serves as a key component of CDPH's comprehensive approach to reducing the spread of HIV in Chicago. This report summarizes results and changes that have taken place from the second and third NHBS data collection cycles among MSM, which were conducted during July–November 2008 and July–December 2011, respectively. This report provides descriptive data from the data collection cycles that can be used to track rates of MSM reporting specific risk behaviors, HIV testing, HIV prevalence, unrecognized HIV infection and participation in prevention programs. Monitoring these data is useful for assessing the proportion of MSM who engage in risk behaviors and for identifying HIV prevention opportunities in this population.

METHODS

NHBS data are collected in annual cycles from one risk group per year so that each group is surveyed once every 3 years. A period of data collection with each specific population is referred to as a cycle. NHBS does not collect participant names or any other identifying information other than birth date and zip code. The same basic eligibility criteria were used in each of the MSM cycles: age ≥ 18 years, current residence in the metropolitan statistical area (MSA), no previous participation in NHBS during the current survey cycle, ability to complete the survey in either English or Spanish, and ability to provide informed consent. In addition to these basic eligibility criteria, participation in the 2008 MSM cycle was open to persons who reported assignment of male sex at birth and self-identified as male, regardless of sexual behavior. In 2011, participation was limited to persons who reported assignment of male sex at birth and self-identified as male and reported having oral and/or anal sex with another male in one's lifetime.

For each survey cycle, a standardized questionnaire was used to collect information about behavioral risks for HIV infection, HIV testing, and use of HIV prevention services. The face-to-face survey was administered by a trained interviewer using a handheld computer. A minimum of 500 eligible males were interviewed in each cycle. All participants were offered an anonymous HIV test, which was linked to the survey data through a unique survey identifier. In 2008, the OraSure® HIV test was used to screen saliva specimens for HIV antibodies. Specimens were tested by EIA and confirmed using Western blot at the Illinois Department of Public Health laboratories. In 2011, the OraQuick rapid HIV test was used to screen saliva specimens for HIV antibodies. Initially-reactive specimens were tested by Western blot for confirmation (via OraSure saliva specimen) at the Illinois Department of Public Health laboratories.

Sampling Method

For both cycles, participants for the survey were recruited through time-location sampling methods (5). The primary steps included identifying venues frequented by MSM, determining the best time for sampling at each venue and

the sampling events to be conducted each month, and selection and recruitment of men.

Identification of Venues Frequented by MSM

In Chicago, a team of staff members familiar with the local community conducted formative research to establish a list of venues frequented by MSM (6). To identify possible venues for inclusion in the venue list, the team consulted local publications, online media, members of the local MSM community, business owners, staff members at community-based organizations, key health department staff members, and persons providing medical and social services to MSM. If a venue did not exclusively serve MSM, the team observed and conducted brief interviews at the venue. Brief interviews were used to assess the eligibility of male patrons for NHBS and their history of sex with other men. If the information from these brief interviews indicated that the venue would yield a sufficient number of MSM (i.e., $\geq 75\%$ of men approached would meet the eligibility criteria and reported sex with other men), the venue was included on the venue list. Clinics and other health-care settings were specifically excluded because of the potential for introducing bias in several key indicators (e.g., HIV testing history and access to health care). Venues on the list were categorized as a bar, dance club, fitness club or gymnasium, Gay Pride event, park or beach, large dance party (e.g., rave or circuit party), café or restaurant, retail business, sex establishment or sex environment, social organization, street location, or another venue type, such as an event hosted by the local house ball community. Examples of social organizations were athletic leagues, hobby/special interest group meetings, and faith-based organizations. Sex environments consisted of bathhouses, parks, beaches, and back rooms of bars/bookstores where sexual activity took place. Recruitment on sidewalk corridors occurred in neighborhoods where many MSM live and congregate.

Determination of the Best Time for Sampling at Each Venue

After the venues frequented by MSM were identified, the team determined the best days of the week and the best times (typically 4-hour periods) at each venue to safely interview a sufficient number of eligible men. Days and times for each venue were placed on a list that was later used to determine sampling events for each month. This venue list became the sampling frame.

Determination of the Sampling Events for a Given Month

On average, 14 sampling events were conducted every month. A sampling event consisted of a single visit to a venue during one day and time specified for that venue. From the sampling frame, the team would first randomly select 14 venues without replacement. Then for each of the 14 venues, the team would randomly select a day and time period. These sampling periods were scheduled on a calendar for the month so that the CDPH team would know where to conduct sampling events.

Selection and Recruitment of Men at a Sampling Event

During each sampling event, a team of recruiters and interviewers visited the venue to enroll men in the study. After arrival, the team would establish boundaries (an area or a line) for recruiting potential participants. The established boundaries were unknown to potential participants. All men entering the defined area or crossing the defined line were approached sequentially for recruitment.

DATA COLLECTION

Men who were recruited were escorted to a private area for the interview. A brief interview was conducted to determine eligibility for NHBS; men who were deemed eligible were invited to participate. Men who accepted the invitation to participate were asked to provide informed consent for the interview. Men who consented to the interview were offered an anonymous HIV test as part of the survey. Trained interviewers conducted face-to-face interviews using handheld computers. Interviews took about 30 minutes to complete and consisted of questions about demographic characteristics, HIV testing history, sexual and drug use behaviors, hepatitis testing and vaccination, STD testing and diagnosis, and use of HIV prevention services and programs. Participants received \$25 in cash for participation. For participants who consented to the anonymous HIV testing, standard CDPH HIV testing and counseling procedures were followed, and an additional \$25 was provided.

Participants

In 2008, a total of 1,485 men were approached for participation at 57 venues in Chicago. Of the 710 who were screened for participation in NHBS, 672 (95%) were eli-

gible for the survey interview. Of the 672 eligible men, 669 agreed to participate and completed the survey interview. A total of 99 completed interviews from the 2008 data collection cycle were excluded because respondent had not had sex with another man during the 12 months before the interview. A total of 570 MSM from the 2008 cycle were included in this analysis.

In 2011, a total of 1,426 men were approached for participation at 47 venues in Chicago. Of the 606 who were screened for participation in NHBS, 535 (88%) were eligible for the survey interview. Of the eligible men, 531 agreed to participate and completed the survey interview. 526 men reported having oral and/or anal sex with another male during the 12 months prior to the interview and form the basis of the 2011 analyses.

Venues

Participants were recruited at venues where MSM comprised at least 75% of the attendees. In 2008, the 57 venues that were sampled included: bars (41%), dance clubs (20%), social organizations (14%), street locations (12%), sex environments (6%), gay pride events (5%), and retail stores (3%).

In 2011, the 47 venues that were sampled included: bars (43%), dance clubs (22%), social organizations (11%), street locations (11%), sex environments (5%), gay pride events (4%), and retail stores (2%).

Data Collection Periods

Formative research was conducted from January through July of both years to garner community support and to identify venues and days and times when MSM frequented these venues. Data collection took place from August through December of each respective year.

DATA ANALYSIS

This surveillance summary presents the results of a descriptive analysis of key behavioral surveillance indicators for MSM in Chicago; for selected comparisons, results of chi-square bivariate or stratified analysis are shown to highlight significant differences. The data for participants were analyzed according to race/ethnicity and age

group. Responses for race/ethnicity were categorized into mutually exclusive categories: non-Hispanic white; non-Hispanic black; and Hispanic or Latino. Men who identified as American Indian or Alaska Native; Asian, Native Hawaiian, or other Pacific Islander; or some other racial group were not included in the majority of report due to very small sample sizes. MSM who reported being between 18 and 29 years old at the time of the survey were considered 'young' or a youth for this report.

HIV Prevalence and Unrecognized HIV Infection

A nonreactive rapid test or a negative-EIA was considered a definitive negative result; reactive (preliminary positive) rapid test results or positive-EIA were considered definitive positive only when confirmed by Western Blot. MSM unaware of their HIV infection (unrecognized infection) were defined as those who tested HIV-positive at the time of the interview but reported that the result of their most recent HIV test was negative, indeterminate, or unknown, or that they had never been tested.

HIV-Positive MSM

Partner services can reduce the spread of HIV by facilitating the confidential identification and notification of partners who may have been unknowingly exposed to HIV, providing them with HIV testing, and linking them to prevention and care services. Partner services are a key component in the High-Impact Prevention approach to reducing new HIV infections. HIV-positive participants who were diagnosed previous to the survey, were asked if they were offered partner services at the time of their HIV diagnosis. Many sexually transmitted infections (STIs) increase an individual's risk of transmitting HIV, and STI treatment may reduce HIV viral load. Therefore, STI screening and treatment may reduce risk for HIV transmission. Participants were asked whether they had been tested for each of the three STIs during the 12 months before the interview and whether they had been told during the past 12 months by a nurse, physician, or other health-care provider that they had an STI. Because MSM are at increased risk for infection with hepatitis A and hepatitis B virus, public health recommendations for sexually active MSM include both hepatitis A and B vaccinations (9,10). Hepatitis A vaccination was defined as reporting

having ever received at least 1 dose of hepatitis A vaccine. Hepatitis B vaccination was defined as reporting having ever received at least 1 dose of hepatitis B vaccine. Treating people living with HIV early in their infection dramatically reduces the risk of transmitting the virus to others, underscoring the importance of HIV testing and access to medical care and treatment. A recent clinical trial showed that treating people living with HIV early on reduces the risk of transmitting the virus to others by 96 percent. Participants were asked whether they have seen a health care provider for their HIV infection and if they were currently taking antiretroviral medications (ART) to treat their HIV infection.

Social Determinants

Social determinants are complex, integrated, and overlapping social structures and economic systems, that are often linked to lack of opportunity and to a lack of resources to protect, improve, and maintain health. Structural and societal factors such as social and physical environments, and access to health services, create pathways or barriers to good health. These factors are affected by the distribution of power and resources, all of which can be addressed through policy. Studies have shown that many social determinants, such as housing conditions, employment status, education level, income, social support and criminal justice issues can be key drivers for a person to become infected with HIV or other STIs (16). This report examines rates of homelessness (in the past 12 months), incarceration (in one's lifetime), current unemployment, high school graduation, and living in poverty (household annual income less than the federal poverty level according to household size (\leq \$10,890 for a one-person household in 2011 (Source: Federal Register, Vol. 76, No. 13, January 20, 2011, pp. 3637-3638)). The majority (60%) of MSM reported their annual income supported only themselves.

Health Care and Access

Health care and access, another key social determinant, remains an important structural factor to create barriers or pathways to good health. Participants were asked whether they currently have health insurance and whether there is a place that they usually go when they are sick or need advice about their health. We defined this as a 'regular source of medical care'. Expanding HIV testing

to routine medical visits is a key strategy in lowering the rate of unrecognized infection. Participants were asked whether they had been offered an HIV test by their health care provider during the last 12 months. Many LGBT adults in the United States don't reveal their sexuality to their doctors. That reluctance to speak openly with one's doctors may put LGBT adults at risk for serious—even life-threatening—health complications. We asked MSM participants if they had ever told their health care provider that they are attracted to or have sex with men

Sexual Behavior

The sexual behavior that carries the highest risk for HIV transmission between MSM is unprotected anal sex (7). Unprotected anal sex with a male partner (overall in the 12 months before the interview and specifically, the most recent encounter) is presented as the key risk behavior for HIV transmission among MSM. Participants were asked about characteristics of the most recent sexual encounter with a male casual sex partner and the participant's relationship with that partner. The following characteristics were assessed: engaged in unprotected anal sex, knowledge of HIV status of most recent partner, used drugs while having sex with most recent partner and race/ethnicity of partner. Participants were also asked where they met most recent male sex partner.

STI Testing and Diagnosis

MSM are at increased risk for acquiring sexually-transmitted infections (STI) (11); and, STIs can increase the likelihood of acquiring HIV (12). Public health recommendations for sexually active MSM include testing at least annually for common STIs, including syphilis, gonorrhea, and chlamydia (13). In 2008, the NHBS questionnaire did not ask about testing for STIs other than syphilis and HIV. For 2011, questions were added to include testing for gonorrhea, chlamydia and syphilis. Participants were asked whether they had been tested for each of the three STIs during the 12 months before the interview and whether they had been told during the past 12 months by a nurse, physician, or other health-care provider that they had an STI.

Illicit Drug Use

Participants were asked about their use of non-injection drugs during the past 12 months. Club drugs included

ecstasy (MDMA), Special K (ketamine) and GHB (gamma hydroxybutyrate acid). Use of poppers (also known as amyl nitrate) and painkillers (including any opioid pain medication such as oxycontin or morphine) taken without a prescription were also included.

[HIV Testing and Behavioral Intervention](#)

Because sexually active MSM are at increased risk for HIV infection, CDC recommends they be tested for HIV infection at least annually (8). Data are presented on whether participants had met the CDC guidelines for HIV testing over the past two years prior to the survey. Behavioral interventions can substantially reduce sexual

risk behaviors and thus the likelihood of acquiring HIV (14). Knowing the characteristics of persons who participated in behavioral interventions during the 12 months before the interview can be an indicator of whether these interventions are reaching the intended populations. Participants were asked about participation in individual- or group-level HIV-related behavioral interventions during the past 12 months. The definitions for both intervention levels were based on the intervention types in CDC's evaluation system (15). Conversations that took place solely as a part of obtaining HIV testing (e.g., pretest or posttest counseling) were not considered HIV behavioral interventions.

TABLE 1. HIV Related Behaviors, Past 12 Months – Chicago HIV Behavioral Surveillance System: Men Who Have Sex with Men, 2008 and 2011.

Characteristic	2008 (N = 570)		2011 (N = 526)	
	N	%	N	%
Unprotected male-male anal sex	295	51.8	311	59.1
More than 1 male sex partner	432	75.8	415	78.7
Used any illicit drug	271	47.5	278	52.9
Tested for HIV infection	381	66.8	367	69.8
Tested for STI*	-	-	281	53.4
Received free condoms	428	75.1	435	82.7
Participated in individual HIV behavioral intervention	94	16.5	117	22.2
Participated in group HIV behavioral intervention	43	7.5	53	10.1

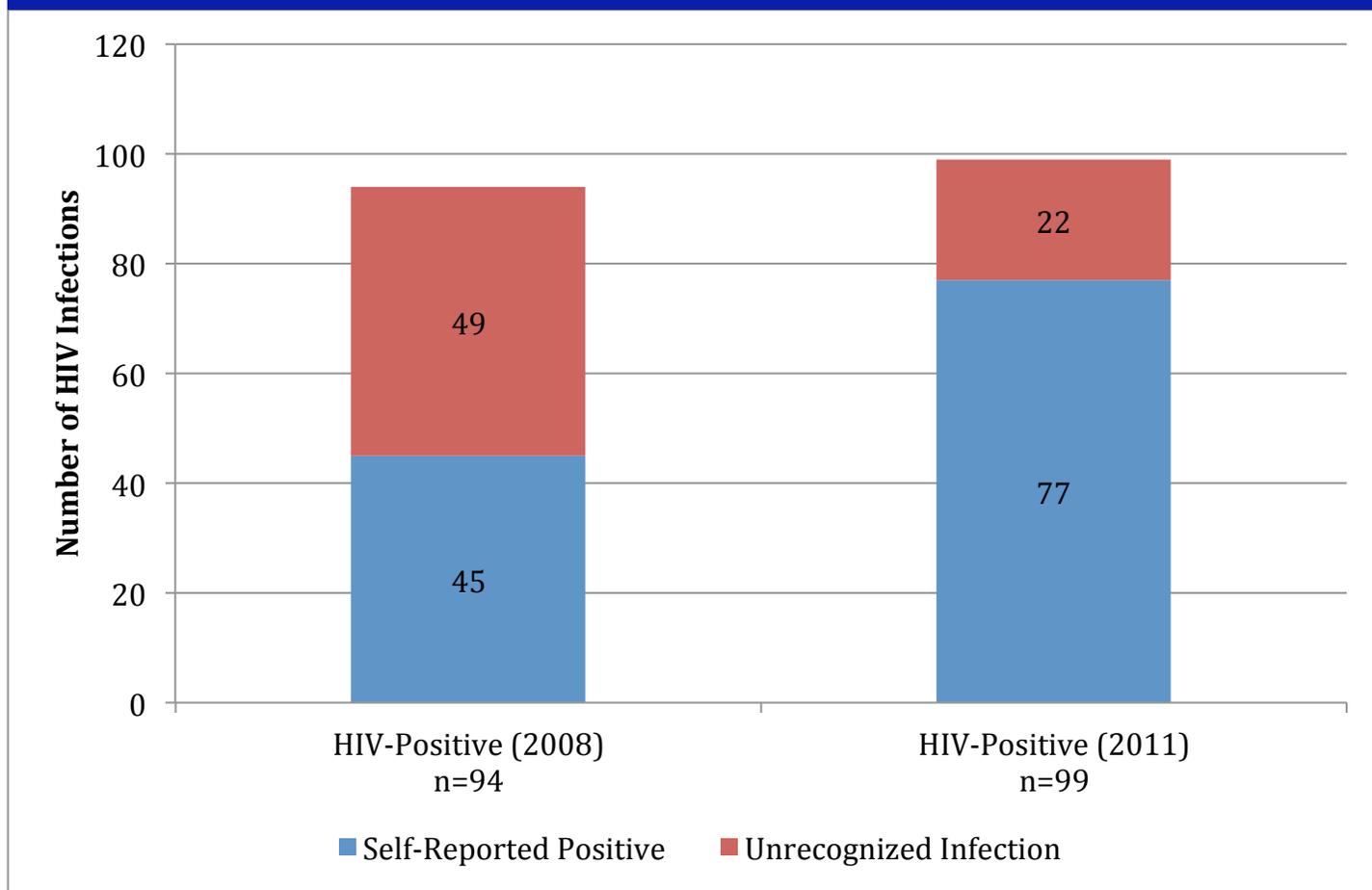
* STIs include gonorrhea, chlamydia and/or syphilis. Question not asked in 2008 survey

CORE NHBS BEHAVIORAL INDICATORS AT-A-GLANCE

Overall, MSM reported higher rates of unprotected anal sex in 2011 compared to 2008. Almost 60% of all MSM reported having unprotected anal sex with a male partner during 2011, compared to 52% in 2008 ($p < .05$). Nearly 80% reported multiple sex partners and 53% reported any illicit drug use during 2011. These rates were simi-

lar to those in the 2008 survey. HIV prevention behaviors were increasingly reported during 2011 compared to 2008 MSM survey respondents. In 2011, 99% of MSM reported having a lifetime HIV test and 70% had an HIV test in the prior 12 months. Additionally, 83% received free condoms from a clinic, social organization, or bar/club in 2011, a higher proportion than in 2008 ($p < .01$). Participation in individual-level behavioral interventions was more common in 2011 compared to 2008 ($p < .05$).

Figure 1. HIV Prevalence and Unrecognized Infection, All MSM
Chicago HIV Behavioral Surveillance System: Men Who Have Sex With Men, 2008 and 2011



HIV PREVALENCE AND AWARENESS OF HIV INFECTION

In 2008, ninety-one percent (91%) of survey participants agreed to be tested for HIV. Of the 519 MSM tested for HIV as part of the 2008 NHBS survey, 94 men tested HIV-positive. Thus, the overall HIV prevalence rate among participants in 2008 was 18.1%. Over half of

all MSM (52%) who tested positive for HIV during the 2008 survey were unaware of their HIV infection. In 2011, 90% of survey participants agreed to be tested for HIV. Of the 474 MSM tested for HIV, 99 men tested HIV-positive, for an overall HIV prevalence rate of 20.9%. 22 of 99 (22%) who tested positive for HIV during the survey were unaware of their HIV infection.

TABLE 2. HIV Prevalence by Race/Ethnicity and Age – Chicago HIV Behavioral Surveillance System: Men Who Have Sex with Men, 2008 and 2011.

Characteristic	Black				White				Hispanic			
	2008		2011		2008		2011		2008		2011	
	N/# tested	%										
Age												
18-29	27/95	28.4	24/86	27.9	1/89	1.1	5/50	10.0	6/64	9.4	5/62	8.1
30-39	13/32	40.6	9/19	47.4	11/62	17.7	10/53	18.9	6/39	15.4	4/25	16.0
40-49	7/17	41.2	9/19	47.4	12/52	23.1	9/58	15.5	2/12	16.7	4/20	20.0
50+	0/2	0.0	5/10	50.0	2/22	9.1	11/47	23.4	0/1	0.0	1/4	25.0
Total	47/146	32.2	47/134	35.1	26/225	11.6	35/208	16.8	14/116	12.1	14/112	12.5

HIV PREVALENCE AND AWARENESS OF HIV INFECTION

The examination of prevalence rates among MSM by race/ethnicity revealed stark disparities between groups. In 2008, the HIV prevalence rate among all Black MSM in the sample was 32.2% (47 positives out of 146 tested). This rate was almost three times that of White MSM (11.6%, 26 positives out of 225 tested), and more than two-and-a-half times that of Hispanic MSM (12.1%, 14 positives out of 116 tested). In 2011, the NHBS survey revealed similar patterns in HIV prevalence. There were

observed increases among all three racial/ethnic groups in 2011 (Black MSM: +2.9%; White MSM: +5.2%; Hispanic: +0.4%). The largest increases among Black and Hispanic MSM occurred among those over 40 years of age, while the major increases among White MSM were in both the youngest (under 30 years) and oldest (over 50 years) age categories. The overall HIV prevalence among White MSM under 40 nearly doubled from 7.8% to 14.6% between the two data collection cycles ($p < .001$). There were no observed changes in HIV prevalence in the 18 to 29 year old Black MSM group between the two years ($p > .05$)

TABLE 3. Proportion Unaware of their HIV Infection by Race/Ethnicity and Age – Chicago HIV Behavioral Surveillance System: Men Who Have Sex with Men, 2008 and 2011.

Characteristic	Black				White				Hispanic			
	2008		2011		2008		2011		2008		2011	
	N/# positive	%										
Age												
18-29	18/27	66.7	8/24	33.3	1/1	100	1/5	20.0	3/6	50.0	2/5	40.0
30-39	8/13	61.5	4/9	44.4	4/11	36.4	1/10	10.0	4/6	66.7	1/4	25.0
40-49	5/7	71.4	2/9	22.2	1/12	8.3	0/9	0	0/2	0	0/4	0
50+	0/0	0	2/5	40.0	0/2	0	1/11	9.1	0/0	0	0/1	0
Total	31/47	66.0	16/47	34.0	6/26	23.1	3/35	8.6	7/14	50.0	3/14	21.4

HIV PREVALENCE AND AWARENESS OF HIV INFECTION

In 2008, 66% of Black MSM who tested positive in the sample were unaware of their HIV infection, compared to 50% of Hispanic MSM, and just under one-quarter of White MSM (23%). The 2011 survey revealed dramatic differences in rates of awareness of HIV infection compared to 2008. Sixteen (16) of 47 HIV-positive Black

MSM (34%) were unaware of their HIV infection at the time of the survey. The rate of being unaware of one's infection went from 23% to 9% among White MSM and from 50% to 21% among Hispanic MSM. In bivariate analyses, increases in awareness of infection by race/ethnicity group (all ages) between cycles were statistically significant ($p < .001$). Significant decreases in unrecognized infection occurred among MSM youth across all three race/ethnicity groups.

TABLE 4. HIV Diagnosed MSM Aware of Their Infection by Race/Ethnicity – Chicago HIV Behavioral Surveillance System: Men Who Have Sex with Men, 2008 and 2011.

Characteristic	Black				White				Hispanic			
	2008		2011		2008		2011		2008		2011	
	(N = 16)		(N = 31)		(N = 20)		(N = 32)		(N = 7)		(N = 11)	
	N	%	N	%	N	%	N	%	N	%	N	%
At diagnosis – partner services offered	8	50.0	19	61.3	9	45.0	13	40.6	6	85.7	4	36.4
Tested for STI, past year	-	-	21	67.7	-	-	26	81.3	-	-	10	90.9
Vaccinated for Hep A/B	12	75.0	20	64.5	18	90.0	31	96.9	9	90.0	7	63.6
Seen doctor for HIV care	15	94.0	31	100.0	20	100	32	100	9	90.0	11	100
Currently on ART	7	43.8	26	83.9	18	90.0	32	100	5	50.0	9	81.8

HIV-POSITIVE MSM

MSM who reported being diagnosed with HIV prior to the NHBS survey were asked questions related to ancillary services and HIV care and treatment during the 2008 and 2011 NHBS surveys. Almost two-thirds of HIV-positive Black MSM (61%) reported being offered partner services upon diagnosis of their HIV infection at similar levels between data collection years, compared to well under half of HIV-positive White (40%) and Hispanic MSM (36%) during 2011 ($p < .01$).

Annual STI testing was common among HIV-positive MSM of all race/ethnicity groups but significantly lower among Black MSM. In 2011, 68% of Black MSM compared to 81% of White MSM and 91% of Hispanic MSM reported having a syphilis, gonorrhea or chlamydia test in the prior 12 months. Hepatitis vaccination rates in 2011 were similar between Black and Hispanic MSM

(65% and 64% respectively), but both significantly lower than they were in 2008, but considerably higher among HIV-positive White MSM both compared to minority MSM in 2011 and between survey years (97% in 2011 compared to 90% in 2008) ($p < .001$).

While nearly 100% of HIV-positive MSM reported having seen a doctor for HIV care in both survey years, the proportion of MSM taking HIV anti-retroviral treatment (ART) differed by year and race/ethnicity group. In 2008, less than half of HIV-positive Black MSM (44%) were on ART

HIV-positive MSM at the time of the survey, while over 80% were in 2011 ($p < .01$). Similar increases were seen among HIV-positive Hispanic MSM (50% to 82% from 2008 to 2011 ($p < .01$)). The proportion of HIV-positive White MSM on ART also increased (90% in 2008 to 100% in 2011).

**DEMOGRAPHICS, RISK
and PREVENTION BEHAVIORS**

TABLE 5. Racial/Ethnic Distribution – Chicago HIV Behavioral Surveillance System: Men Who Have Sex with Men, 2008 and 2011.

Characteristic	2008 (N = 570)		2011 (N = 526)	
	N	%	N	%
NH Am. Indian/Alaska Native	2	0.4	4	0.8
NH Asian/Hawaiian/Pacific Isl.	17	3.0	10	1.9
NH Black	156	27.4	149	28.3
Hispanic	126	22.1	126	24.0
NH White	251	44.1	231	43.9
Other/Multiple Races	16	2.8	6	1.1

NH= Non-Hispanic

Race/Ethnicity

Racial distribution between 2008 and 2011 data collection cycles were quite similar by race/ethnicity. Of 570 participants in 2008, 27% were NH Black, 44% were NH White, 22% Hispanic, 3% NH Asian/Pacific Islander, and 3% reported Multiracial or Other. Of the 526 participants in 2011, 28% were NH Black, 44% were NH White, 23% Hispanic, 2% NH Asian/Pacific

Islander, and 2% reported Multiracial and/or American Indian. Reliable summaries of survey results were unable to be calculated for racial/ethnic groups other than Black or White race or Hispanic ethnicity, due to the small numbers surveyed. The remainder of this report will, therefore, focus only on MSM in these three race/ethnicity groups.

TABLE 6. Participant Demographics by Race/Ethnicity – Chicago HIV Behavioral Surveillance System: Men Who Have Sex with Men, 2008 and 2011.

Characteristic	Black				White				Hispanic			
	2008 (N = 156)		2011 (N = 149)		2008 (N = 251)		2011 (N = 231)		2008 (N = 126)		2011 (N = 126)	
	N	%	N	%	N	%	N	%	N	%	N	%
Age												
18-29	102	65.4	90	60.4	48	19.1	56	24.2	35	27.8	73	57.9
30-39	35	22.4	21	14.1	92	36.7	59	25.5	47	37.3	26	20.6
40-49	17	10.9	13	8.7	33	13.1	64	27.7	26	20.6	22	17.5
50+	2	1.3	15	10.1	77	30.7	52	22.5	14	11.1	5	4.0
Education												
High school graduate or less	58	37.2	47	31.5	23	9.2	20	8.7	41	32.5	39	31.0
Some college or more	98	62.8	102	68.5	228	90.8	211	91.3	85	67.5	87	69.0
Annual Income (\$)												
≤ \$19,999	61	39.1	64	43.0	48	19.1	28	12.1	35	27.8	37	29.4
\$20,000-\$49,999	64	41.0	41	27.5	92	36.7	69	29.9	47	37.3	44	34.9
≥ \$50,000	25	16.0	44	29.5	110	43.8	134	58.0	40	31.7	45	35.7

Demographics by Race/Ethnicity

Among Black, White and Hispanic MSM included in the samples there were variations in the age distribution between cycles. The majority of Black MSM were under 30 years of age in both data collection cycles. There were fewer 30 to 39- year old Black MSM in the 2011 sample, and significantly more Black MSM older than 50 compared to 2008 (10% in 2011 compared to 1% in 2008). In 2011, White MSM surveyed were distributed evenly across the 4 age categories. This differed from the 2008 White MSM sample distribution. In 2008, there were fewer older White MSM in the 40+ age categories than in 2011 (44% in 2008 compared to 50% in 2011). Among Hispanic MSM, 79% of the 2011 sample was under 40 years of age compared to 65% in 2008. The majority (58%) of Hispanic MSM were under 30 years of age in 2011 compared to 28% in 2008. The majority of MSM in all race/ethnicity categories in both cycles reported having some college education or higher. There

were major differences in education level between Black and Hispanic respondents compared to White respondents in both cycles, with a higher proportion of Whites having some college or more ($p < .01$). Annual income varied considerably by race/ethnicity and year of data collection. Black and Hispanic MSM were more likely to report incomes less than \$20,000 than were Whites regardless of cycle. In fact, the proportion of White MSM reporting incomes less than \$20,000 was lower in 2011 (12%) compared to levels in 2008 (19%). This was not the case among Black and Hispanic MSM groups which both saw an increasing proportion of respondents reporting lower incomes. In 2011, 43% of Black MSM reported an annual income lower than \$20,000 and almost 30% of Hispanic MSM did so. In contrast, respondents from all three race/ethnicity groups reporting the highest income level (greater than \$50,000) rose in 2011 compared to 2008.

TABLE 7. Social Determinants by Race/Ethnicity – Chicago HIV Behavioral Surveillance System: Men Who Have Sex with Men, 2008 and 2011.

Characteristic	Black				White				Hispanic			
	2008		2011		2008		2011		2008		2011	
	(N = 156)		(N = 149)		(N = 251)		(N = 231)		(N = 126)		(N = 126)	
	N	%	N	%	N	%	N	%	N	%	N	%
Homeless in past 12 months	20	12.8	21	14.1	3	1.2	6	2.6	3	2.4	5	4.0
Ever held in prison or jail*	-	-	40	26.8	-	-	25	10.8	-	--	7	13.5
Currently unemployed	30	19.2	33	22.1	17	6.8	22	9.5	9	7.1	13	10.3
Did not graduate high school	11	7.1	15	10.1	1	0.4	3	1.3	11	8.7	7	5.6
Living in poverty (according to household size)	25	16.0	34	22.8	14	5.6	11	4.8	11	8.7	14	11.1

*In 2008, lifetime incarceration question was not asked

Social Determinants by Race/Ethnicity

Recent homelessness was more often reported during the 2011 cycle than during 2008 in all three race/ethnicity groups. However, it was much more common among Black MSM in both years of data collection compared to White and Hispanic MSM in those years. In 2011, 14% of Black MSM reported being homeless in the past year, compared to 3% among White MSM and 4% among Hispanic MSM ($p < .001$). In 2011, lifetime incarceration was commonly reported among MSM of all three race/ethnicity groups. Over one-quarter (27%) of Black MSM reported having been incarcerated for at least one day in their lifetime. This compared to 11% among

White MSM and 14% among Hispanic MSM ($p < .05$). Socio-economic indicators revealed stark racial disparities as well. Being unemployed at the time of the survey increased between 2008 and 2011, for all race/ethnicity groups. Black MSM reported the highest unemployment rate in 2011 (22%) compared to 10% among White MSM and Hispanic MSM ($p < .05$). In examining annual income more closely, 23% of Black MSM were living in poverty (annual income less than \$10,000 for a one-person household) during 2011, which was similar from 16% in 2008 ($p > .05$). Poverty rate also remained relatively similar among Hispanic MSM from 2008 to 2011 (9% to 11%) and for White MSM ($p > .05$).

TABLE 8. Health Care and Access by Race/Ethnicity – Chicago HIV Behavioral Surveillance System: Men Who Have Sex with Men, 2008 and 2011.

Characteristic	Black				White				Hispanic			
	2008		2011		2008		2011		2008		2011	
	(N = 156)		(N = 149)		(N = 251)		(N = 231)		(N = 126)		(N = 126)	
	N	%	N	%	N	%	N	%	N	%	N	%
Have health insurance	99	63.5	78	52.3	198	78.9	192	83.1	80	63.5	77	61.1
Have a regular source of medical care	-	-	126	84.6	-	-	193	83.5	-	-	92	73.0
Visited health care provider in last 12 months	128	82.1	126	84.6	213	84.9	200	86.9	95	75.4	94	74.6
Health care provider offered HIV test	70	54.7	78	61.9	79	37.1	88	44.0	43	45.3	54	57.4
'Out' to health care provider	106	67.9	116	77.9	211	84.1	187	81.0	90	71.4	88	69.8

Health Care and Access by Race/Ethnicity

Slightly over half of Black MSM (52%) reported having any type of health insurance in 2011. This compared to 83% ($p < .05$) and 61% ($p > .05$) of White and Hispanic MSM, respectively. Eighty-five (85%) of Black MSM reported having a regular source of medical care, similar to Whites, and higher than Hispanic MSM (73%). Hispanic MSM reported seeing a doctor less often in the previous year (75%) than either Black (85%, $p < .05$) or White MSM (87%, $p < .05$). Among those who reported visiting a health care provider, Black MSM were more likely to

be offered an HIV test (62%), than White (44%, $p < .01$) but not compared to Hispanic MSM (57%, $p > .05$). Being offered an HIV test at a health care provider visit was more commonly reported among MSM in 2011 than in 2008. Black MSM also increasingly reported being 'out' about their same-sex behavior with their health care provider in 2011 (78%) compared to 2008 (68%) though the difference was not significant ($p > .05$). Overall, the majority of MSM (all races) did report being 'out' to their doctor.

TABLE 9. Sex Behaviors by Race/Ethnicity – Chicago HIV Behavioral Surveillance System: Men Who Have Sex with Men, 2008 and 2011.

Characteristic	Black				White				Hispanic			
	2008		2011		2008		2011		2008		2011	
	(N = 156)		(N = 149)		(N = 251)		(N = 231)		(N = 126)		(N = 126)	
	N	%	N	%	N	%	N	%	N	%	N	%
Unprotected anal sex with a man – past 12 months	81	51.9	83	55.7	125	49.8	136	58.9	68	54.0	79	62.7
Don't know status of most recent sex partner	59	37.8	54	36.2	66	26.3	85	36.8	46	36.5	55	43.7
Drug and/or alcohol use before or during most recent sex	61	39.1	49	32.9	100	39.8	119	51.5	54	42.9	51	40.5
Most recent partner of same race	-	-	91	61.1	-	-	154	66.7	-	-	50	39.7
# Male sex partners (median past 12 months)	3		3		3		4		3		3	

Sexual Risk Behaviors by Race/Ethnicity

In 2011, over half (59%) of Chicago MSM reported engaging in unprotected anal sex (UAI) with a man. This rate is higher than the overall 2008 rate among MSM of 52%. The higher rate was more pronounced among White MSM of whom 50% reported engaging in UAI in 2008 compared to 59% in 2011 ($p < .05$); and among Hispanic MSM of whom 54% reported engaging in UAI in 2008 and 63% in 2011 ($p > .05$). White MSM reported more male sex partners in the past year (median: 4) in 2011 than Black and Hispanic MSM (median: 3). Among Black MSM, over one-third reported not knowing the HIV status of their most recent sex partner (36%)

in 2011, similar to the rate in 2008. This proportion increased between years among White and Hispanic MSM (among Whites, 26% did not know last partner status in 2008 and 37% in 2011, ($p < .05$); among Hispanics, 37% did not know last partner status in 2008 and 44% in 2011, $p > .05$). In 2011, drug and alcohol use occurred before or during the most recent sexual encounter with a male more than half the time among White MSM (52%) compared to Black (33%, $p < .001$) or Hispanic MSM (41%, $p < .05$). In 2011, Black and White MSM were more likely to report that their most recent male sex partner was of the same race/ethnicity (61% and 67%), than Hispanic MSM (40%, $p < .01$).

TABLE 10. Location Met Most Recent Casual Sex Partner by Race/Ethnicity – Chicago HIV Behavioral Surveillance System: Men Who Have Sex with Men, 2008 and 2011.

Characteristic	Black				White				Hispanic			
	2008		2011		2008		2011		2008		2011	
	(N = 64)		(N = 67)		(N = 119)		(N = 126)		(N = 50)		(N = 61)	
	N	%	N	%	N	%	N	%	N	%	N	%
Internet	16	25.0	18	26.9	37	31.1	32	25.4	8	16.0	18	29.5
Bar/Club	22	34.4	12	17.9	46	38.7	55	43.7	17	34.0	20	32.8
Cruising area	2	3.1	5	7.5	2	1.7	2	1.6	3	6.0	2	3.3
Bath house	3	4.7	6	9.0	3	2.5	14	11.1	4	8.0	3	4.9
Somewhere else	18	28.1	22	32.8	28	23.5	19	15.1	17	34.0	15	24.6

Location of Meeting Male Sex Partners by Race/Ethnicity

In 2008, bars and clubs were the most common place for all MSM to report meeting sex partners. However, by 2011, among Black MSM, the proportion who reported meeting their last casual sex partner in a bar or club went from 34% to 18%. For White and Hispanic MSM, bars/clubs were still the most common venues to meet sex partners. In 2011, approximately one-quarter of all

MSM reported meeting their most recent sex partner on the internet. Among Hispanics, this rate increased from 16% in 2008 to 30% in 2011. For Black MSM, the most common place to report meeting a casual sex partner was somewhere other than the internet, a bar or club, a cruising area or a bathhouse (33%) with the internet being the second most common.

TABLE 11. Sexually Transmitted Infections by Race/Ethnicity – Chicago HIV Behavioral Surveillance System: Men Who Have Sex with Men, 2011.

Characteristic	Black (N = 149)		White (N = 231)		Hispanic (N = 126)	
Lifetime Genital Herpes	4	2.7	14	5.6	5	4.0
Tested for STI in past 12 months	90	60.4	123	53.2	58	46.0
Diagnosed Gonorrhea (of tested)	11	12.2	7	5.7	9	15.5
Diagnosed Chlamydia (of tested)	6	6.7	9	7.3	6	10.3
Diagnosed Syphilis (of tested)	17	18.9	5	4.1	5	8.6

* STIs include gonorrhea, chlamydia and/or syphilis. Questions not asked in 2008 survey

Sexually Transmitted Infections by Race/Ethnicity

In 2011, 6% of White MSM reported being diagnosed with genital herpes in their lifetime compared to 3%, (p>.05) among Black and 4%, (p>.05) among Hispanic MSM. Black MSM reported higher rates of STI testing in the prior 12 months (60%) than either White (49%) or Hispanic MSM (46%, p<.01). Among Hispanic MSM who reported being tested for an STI in the past year, 16% were diagnosed with gonorrhea, 10% were

diagnosed with chlamydia and 9% were diagnosed with syphilis. Of White MSM who reported being tested for an STI in the past year, 7% were diagnosed with chlamydia, 6% with gonorrhea and 4% with syphilis. Among Black MSM, 19% of those who tested for an STI in the past year were diagnosed with syphilis, 12% gonorrhea, and 7% chlamydia. Rate of recent syphilis diagnosis among Black MSM was over 4 times higher than that of White MSM and more than double that of Hispanic MSM.

TABLE 12. Drug Use in the Past 12 Months by Race/Ethnicity – Chicago HIV Behavioral Surveillance System: Men Who Have Sex with Men, 2008 and 2011.

Characteristic	Black				White				Hispanic			
	2008		2011		2008		2011		2008		2011	
	(N = 156)		(N = 149)		(N = 251)		(N = 231)		(N = 126)		(N = 126)	
	N	%	N	%	N	%	N	%	N	%	N	%
Any illicit drug use	73	46.8	72	48.3	122	48.6	130	56.3	60	47.6	64	50.8
Club drugs	15	9.6	19	12.8	23	9.2	27	11.7	6	4.8	16	12.7
Methamphetamine	2	1.3	2	1.3	16	6.4	16	6.9	8	6.3	4	3.2
Painkillers	4	2.6	9	6.0	23	9.2	35	15.2	8	6.3	14	11.1
Powdered Cocaine	10	6.4	7	4.7	37	14.7	33	14.3	22	17.5	17	13.5
Poppers	5	3.2	16	10.7	49	19.5	75	32.5	20	15.9	27	21.4
Crack Cocaine	5	3.2	3	2.0	6	2.4	7	3.0	5	4.0	7	5.6
Marijuana	68	43.6	65	43.6	96	38.2	99	42.9	52	41.3	48	38.1

Drug Use

In 2011, illicit drug use was reported among over half (53%) of all MSM. Polydrug use was less common among Black MSM than White or Hispanic MSM (15% among Black vs. 27% among both White and Hispanic MSM ($p < .01$) data not shown). While the proportion of White MSM who reported using an illicit drug was slightly higher compared to Black and Hispanic MSM, the rates were relatively similar overall. The most commonly reported drug used was marijuana, with the highest rate found among Black MSM (44%). Black MSM were less likely to use crystal methamphetamine and

painkillers (e.g. Oxycontin) than Whites ($p < .05$), and powdered cocaine or poppers less likely than White or Hispanic MSM ($p < .01$). Crystal methamphetamine use was reported among 7% of White and 3% of Hispanic MSM and only 1% of Black MSM. Popper use was at 2 to 3 times greater among White and Hispanic MSM than it was among Black MSM (33% and 21% vs. 11%). There was an increase observed in popper use in Black MSM. 3% of Black MSM reported its use in 2008 compared to 10% in 2011. Painkiller use showed a considerable increase in all three race/ethnicity groups from 2008 to 2011.

TABLE 13. HIV Testing and Prevention among MSM by Race/Ethnicity – Chicago HIV Behavioral Surveillance System: Men Who Have Sex with Men, 2008 and 2011.

Characteristic	Black				White				Hispanic			
	2008		2011		2008		2011		2008		2011	
	(N = 156)		(N = 149)		(N = 251)		(N = 231)		(N = 126)		(N = 126)	
	N	%	N	%	N	%	N	%	N	%	N	%
Met HIV testing guidelines (2+ HIV tests in the prior 24 months)*	96	61.5	98	65.8	144	57.4	122	52.8	67	53.2	70	55.6
Received free condoms	123	78.8	131	87.9	182	72.5	184	79.7	94	74.6	103	81.7
Individual-level intervention (ILI)	27	17.3	59	39.6	40	15.9	27	11.7	22	17.5	28	22.2
Group-level intervention (GLI)	22	14.1	30	20.1	11	4.4	11	4.8	9	7.1	10	7.9

* Among MSM who had not been diagnosed with HIV prior to the survey

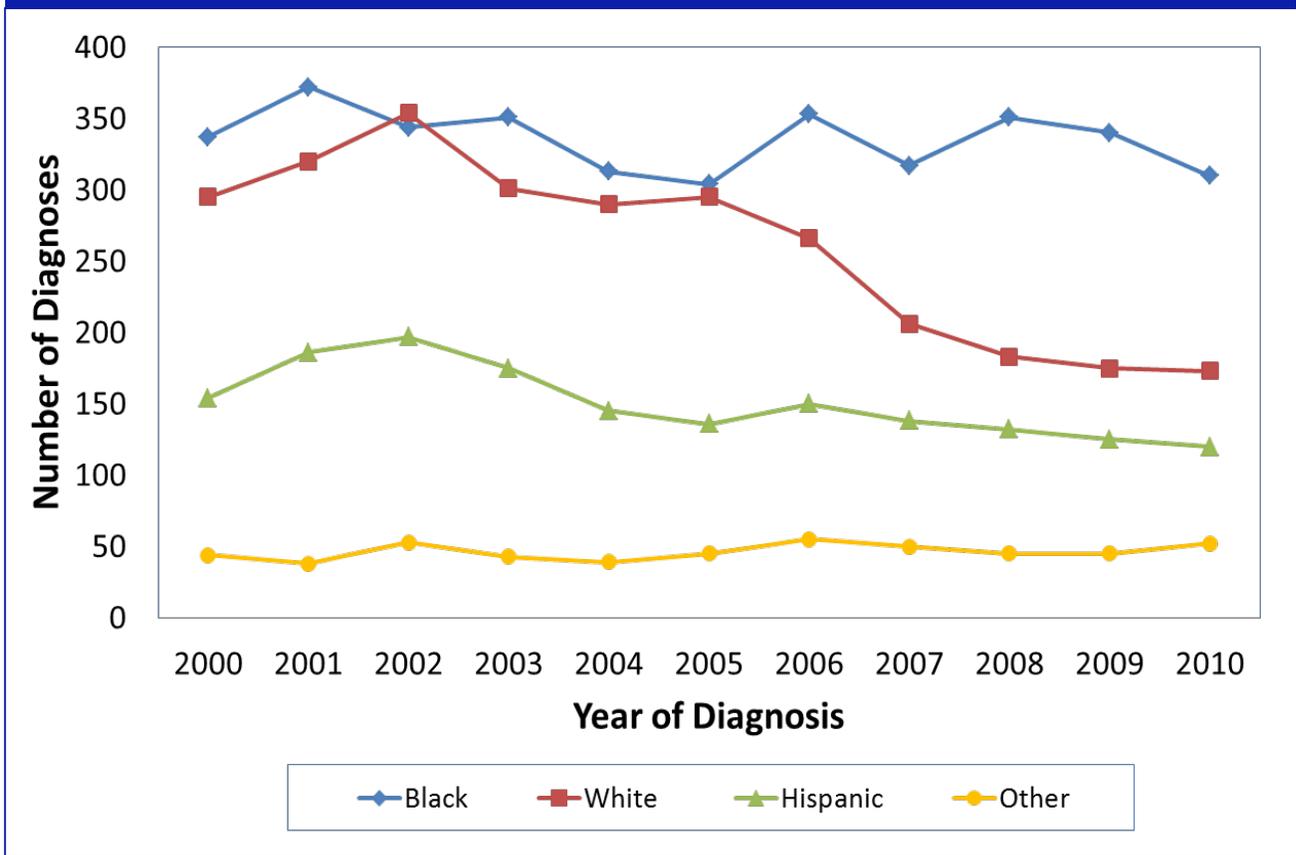
HIV Testing and Prevention Utilization

In 2011, 99% of MSM reported having at least one HIV test in their lifetime (data not shown). This is up from 95% reported in 2008. In 2011, Sixty-six percent (66%) of Black MSM who had not been diagnosed with HIV prior to the survey reported taking at least one HIV test in the past two years, compared to 53% of White MSM and 56% of Hispanic MSM. For the MSM who had not tested in the past year, the most commonly reported main reason for not testing was, “I think I’m at low risk for HIV”, followed by ‘afraid of getting results’. Men who had been tested during the past 12 months were tested most commonly in the offices of private physicians (28%), HIV counseling and testing programs (25%), and public health clinics or community health centers

(21%). Overall, in 2011, 29% of the men surveyed had participated in either an individual-level (ILI) (22%) or group-level (GLI) (10%) behavioral intervention during the past 12 months. The percentages of men participating in HIV behavioral interventions were lowest among white men (ILI: 12%, GLI: 5%) and highest among Black MSM (ILI: 40%, GLI: 20%). The rate for ILI utilization among Black MSM were considerably higher than the rates reported in 2008 (p<.001). White and Hispanic MSM rates were relatively unchanged between the two data cycles. The majority of MSM (82%) reported receiving free condoms in the past year, with Black MSM reporting the highest rate (88%). Rates of reporting receiving free condoms increased similarly across all three race/ethnicity groups from 2008 to 2011.

BLACK MSM IN CHICAGO

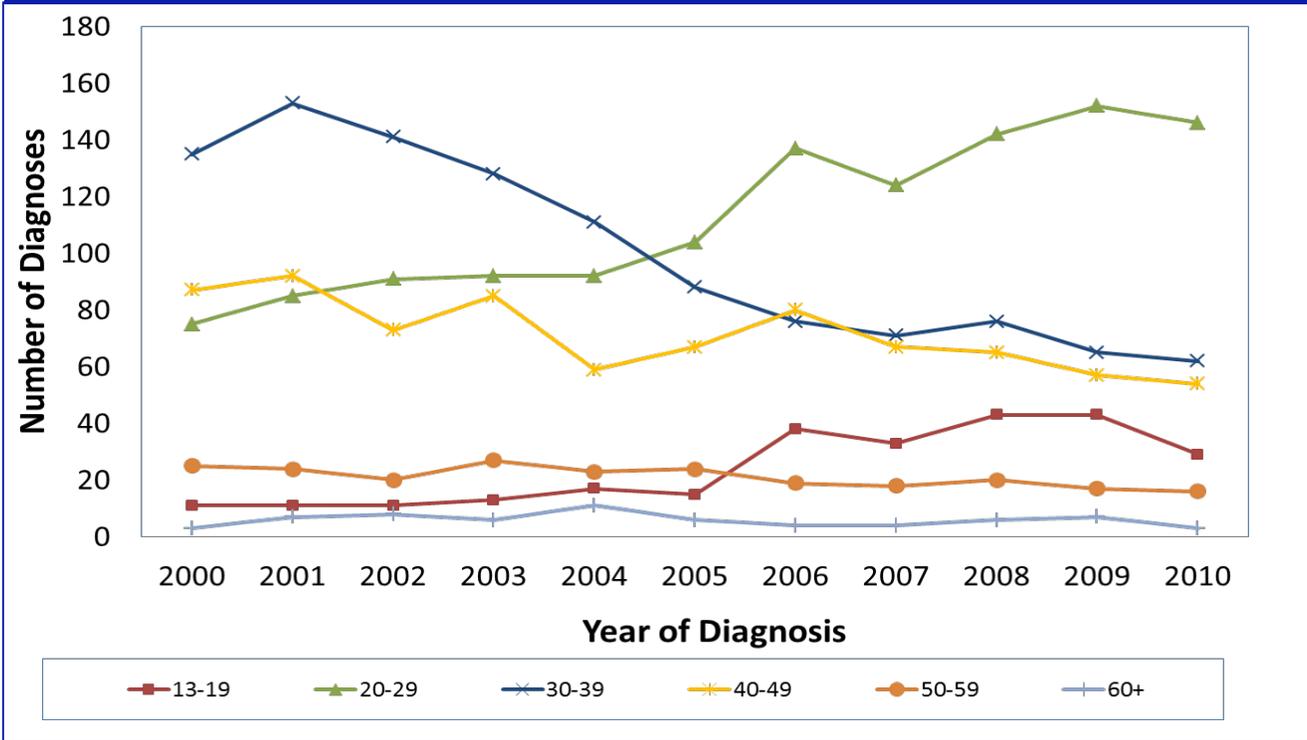
Figure 2. Trends in HIV Infection Diagnoses in MSM by Race/Ethnicity, Chicago, 2000-2010



As of 2010, Black MSM make up over a third of new HIV infection diagnoses in the city of Chicago. From 2000 to 2005, Black and White MSM had relatively similar numbers of HIV diagnoses annually. Beginning in 2006 and through 2008, however, the number of HIV

diagnoses among White MSM dropped dramatically by over one-third, while HIV diagnoses among Black MSM remained stable over the same period. There has been no decrease in the number of HIV diagnoses among Black MSM since 2000. (3)

Figure 3. Trends in HIV Infection Diagnoses in Black MSM by Age Group, Chicago, 2000-2010



When one looks at trends in the Black MSM HIV epidemic in Chicago by age group over time there have been some dynamic shifts between youth and older MSM. Historically, the overall MSM HIV epidemic has been dominated by men between 30 and 49 years old. In 2001, the number of diagnoses among Black MSM 30 to 39 began a dramatic decline. In 2005, the same year Chicago saw decreases in HIV diagnoses in White MSM, 20 to 29 year old Black MSM reported more HIV diagnoses than the 30 to 49 year old Black MSM groups and the number of

diagnoses among 13 to 19 year old Black MSM nearly tripled. By 2010, the most recent year of HIV case surveillance data complete, the number of HIV diagnoses among Black youth (under 30 years of age) had exceeded the combined total number of HIV diagnoses among all other Black MSM 30 years and older. (3) The following tables present NHBS behavioral data for all Black MSM in the 2011 sample by two age groups: youth (under 30 years old) and those over 30 years of age.

**TABLE 14. Social Determinants - Black MSM
by Age Group – Chicago HIV Behavioral Surveillance System:
Men Who Have Sex with Men, 2011.**

Characteristic	18-29 years old (N = 90)		30+ years old (N = 59)	
	N	%	N	%
Homeless in the past 12 months	16	17.8	5	8.5
Ever held in prison or jail	29	32.2	11	18.6
Currently unemployed	24	26.7	9	15.3
Did not graduate high school	12	13.3	3	5.1
Living in poverty (according to household size)	27	30.0	7	11.9

Social Determinants by Race/Ethnicity

Homelessness in the past 12 months was reported by 18% of young Black MSM. This rate is 4- to 6-times higher than the rate reported by White and Hispanic MSM overall ($p < .001$). Almost one-third of young Black MSM surveyed reported incarceration for at least one day during their lifetime. Socio-economic indicators revealed the

intense burden on young Black MSM. Over one-quarter of young Black MSM were unemployed at the time of the survey. More than 1 in 8 Black MSM youth surveyed did not finish high school and 30% of young Black MSM were living in poverty (annual income less than \$10,000) at the time of the 2011 survey.

TABLE 15. Health Care and Access of Black MSM by Age Group- Chicago HIV Behavioral Surveillance System: Men Who Have Sex with Men, 2011.

Characteristic	18-29 years old (N = 90)		30+ years old (N = 59)	
	N	%	N	%
Have health insurance	38	42.2	40	67.8
Have a regular source of medical care	70	77.8	56	94.9
Visited health care provider in last 12 months	76	84.4	50	84.7
Health care provider offered HIV test	49	64.5	29	58.0
'Out' to health care provider	68	89.5	48	96.0

Health Care and Access by Race/Ethnicity

Less than half of young Black MSM (42%) reported having any type of health insurance in 2011. In contrast, more than three-quarters of young Black MSM reported having a regular source of medical care (78%). 84% of young Black MSM reported seeing a doctor in the pre-

vious year. When respondents did report last visiting a health care provider, 65% of young Black MSM were offered an HIV test. Almost all young Black MSM reported being 'out' about their same-sex behavior with their health care provider in 2011 (90%).

TABLE 16. Sex Behaviors of Black MSM by Age Group – Chicago HIV Behavioral Surveillance System: Men Who Have Sex with Men, 2011.

Characteristic	18-29 years old (N = 90)		30+ years old (N = 59)	
	N	%	N	%
Unprotected anal sex with a man – past 12 months	52	62.2	31	52.5
Don't know status of most recent sex partner	30	33.3	24	40.7
Last sex partner same race as respondent	60	66.7	31	52.5
Drug and/or alcohol use before or during most recent sex	30	33.3	19	32.2
# Male sex partners (median past 12 months)	3		4	

Sexual Risk Behaviors

In 2011, the majority of young Black MSM reported having anal sex with a man without using a condom (62%). This was significantly more frequent than for older Black MSM ($p < .01$). One-third of young Black MSM reported not knowing the HIV status of their most recent sex male sex partner. It was common for young Black MSM to

report that their last male sex was of the same race – much more so than it was for older Black MSM ($p < .01$). One-third of all Black MSM respondents reported using drugs and/or alcohol before their most recent sexual encounter with another male. Black MSM reported more male sex partners on average than younger Black MSM.

TABLE 17. Location Met Most Recent Casual Sex Partner of Black MSM by Age Group – Chicago HIV Behavioral Surveillance System: Men Who Have Sex with Men, 2011.

Characteristic	18-29 years old (N = 39)		30+ years old (N = 31)	
	N	%	N	%
Internet	13	33.3	5	16.1
Bar/Club	4	10.3	8	25.8
Cruising area	3	7.7	2	6.5
Bath house	2	5.1	4	12.9
Somewhere else	14	35.9	8	25.8

Location of Meeting Male Sex Partners

In 2011, the Internet was the most frequently named location at which young Black MSM reported meeting male sex partners. One-third reported meeting partners through this method. However, an unnamed location other than the internet, a bar/club, a cruising area, or a bathhouse was the most common response among young

Black MSM overall. Far fewer young Black MSM met their male sex partners at bars/clubs compared to older Black MSM (10% compared to 26% ($p < .01$)) or at bathhouses (5% compared to 13% ($p < .05$)). Subsequent behavioral surveillance surveys will elucidate meeting locations in more detail.

TABLE 18. Sexually Transmitted Infections of Black MSM by Age Group – Chicago HIV Behavioral Surveillance System: Men Who Have Sex with Men, 2011.

Characteristic	18-29 years old (N = 90)		30+ years old (N = 59)	
	N	%	N	%
Lifetime Genital Herpes	3	3.3	1	1.7
Tested for STI in past 12 months	60	66.7	30	50.8
Diagnosed Gonorrhea	10	17.9	1	3.6
Diagnosed Chlamydia	6	10.5	0	0
Diagnosed Syphilis	11	19.3	6	21.4

Sexually Transmitted Infections by Race/Ethnicity

In 2011, STI testing and diagnosis was far more common among young Black MSM compared to older Black MSM. Over 3% of young Black MSM reported genital herpes in their lifetime. Black MSM reported higher rates

of STI testing in the prior 12 months (67%) than did older Black MSM. 18% of young Black MSM reported a gonorrhea diagnosis, 11% reported a chlamydia diagnosis and 19% reported a syphilis diagnosis in the 12 months prior to the survey. Older Black MSM had higher rate of reporting a recent syphilis infection (21%).

TABLE 19. Drug Use in the Past 12 Months of Black MSM by Age Group – Chicago HIV Behavioral Surveillance System: Men Who Have Sex with Men, 2011.

Characteristic	18-29 years old (N = 90)		30+ years old (N = 59)	
	N	%	N	%
Any illicit drug use	45	50.0	27	45.7
Club drugs	16	17.8	3	5.1
Methamphetamine	1	1.1	1	1.7
Downers/Painkillers	7	7.8	2	3.4
Powdered Cocaine	4	4.4	3	5.1
Poppers (Amyl Nitrate)	7	7.8	9	15.3
Crack Cocaine	1	1.1	2	3.4
Marijuana	42	46.7	23	39.0

Drug Use

While the proportion of young Black MSM who reported using an illicit drug was slightly higher compared to older Black MSM, the rates were relatively similar overall. The most commonly reported drug used among both age groups was marijuana, with the highest rate found

among the younger group of Black MSM. Young Black MSM were less likely to use crystal methamphetamine, crack and powdered cocaine, or poppers than older Black MSM. Club drugs and painkillers were used more than twice as often by young Black MSM than by older Black MSM.

TABLE 20. HIV Testing and Prevention of Black MSM by Age Group – Chicago HIV Behavioral Surveillance System: Men Who Have Sex with Men, 2011.

Characteristic	18-29 years old (N = 90)		30+ years old (N = 59)	
	N	%	N	%
Met HIV testing guidelines (2+ HIV tests in the past 2 years)	64	71.1	34	57.6
Received free condoms	82	91.1	49	83.1
Individual-level intervention	42	46.7	17	28.8
Group-level intervention	25	27.8	5	8.5

HIV Testing and Prevention

In 2011, 71% of young Black MSM who had not been diagnosed with HIV prior to the survey reported taking at least two HIV tests in the past two years, compared to 58% of older Black MSM. For the both age groups of Black MSM who had not tested in the past year, the most commonly reported main reason for not testing was, “I think I’m at low risk for HIV”, followed by fear of testing positive. Men who had been tested during the past 12

months were tested in public health clinics or community health centers (36%), HIV counseling and testing programs (28%) and the offices of private physicians (25%). Overall, young Black MSM had participated in either an individual-level (28%) or group-level (9%) behavioral intervention during the past 12 months. Almost all (91%) of young Black MSM reported receiving free condoms in the past year, compared with 83% of older Black MSM.

LIMITATIONS

The findings in this report are subject to several limitations. First, a single standard for obtaining a representative sample of the MSM population in Chicago has yet to be established (17). The venue-based, time-location sampling methods are used to produce estimates for hard-to-reach populations when sampling frames of the individual members of those populations do not exist or are difficult to construct. However, the data in this report are not weighted to account for variations in venue attendance or likelihood of being selected to participate in the survey. Second, these data might not include all MSM living in the MSA because the venue sampling frames do not account for MSM who do not attend those venues. In addition, certain venues attended by MSM at high risk (e.g., cruising locations) might have been underrepresented. Third, because the survey was administered by an interviewer, certain behaviors might have been underreported or overreported. For example, participants might have underreported socially undesirable behaviors (e.g., drug use) or might have overreported socially desirable behaviors (e.g., using condoms during anal sex or being tested recently). Fourth, in some instances, stratification by demographic characteristics might have produced numbers that were too small for reliable interpretation. Because statistical tests were not performed, differences in behaviors between groups should be interpreted with caution. And lastly, comparing two cycles of NHBS MSM data (2008 and 2011) should be done cautiously. The percentages reported in this report might have been influenced by differences in the survey instruments (e.g. in the venues identified and included on the monthly sampling frames in each year, and because this analysis did not control for demographic differences in the samples, which might have influenced the percentages reported.

DISCUSSION

HIV Prevalence and Awareness of Infection

The level of HIV infection among MSM is significantly higher than other groups at risk for HIV in Chicago. In 2007, NHBS-Chicago found the HIV prevalence rate among heterosexual males and females from at-risk Chi-

cago neighborhoods to be 1.8% (14 positives of 759 tested). HIV prevalence rates for injection drug users (IDU) surveyed as part of NHBS-Chicago in 2009 was 5.5%. Also, CDPH has estimated that in 2010, the HIV prevalence rate among the general male population in Chicago was 1.2%. The overall 2011 prevalence rate of HIV infection among Chicago MSM, 20.9%, as found in this study, complements CDPH HIV case surveillance data that show MSM continuing to make up the majority of new HIV diagnoses and of persons living with HIV in Chicago. As MSM live longer with HIV, it is expected that the overall HIV prevalence will continue to rise. Indeed, from the 2008 to the 2011 MSM survey we observed an increase from 18.1% to 20.9%. The high overall HIV prevalence among MSM and increases observed among Black and White MSM calls for broad-based, community-wide prevention and linkage to care campaigns in support of ongoing targeted prevention interventions and programs designed to sustain adherence to care and treatment regimens.

The dramatic decreases in unrecognized HIV infection from 52% in 2008 to 22% in 2011 could be an indication that MSM are more willing to talk about their infections to NHBS interviewers and others and/or HIV testing programs are targeting and reaching the highest risk populations. Of particular importance is the decrease in unrecognized infections among young Black MSM between data collection cycles (66% in 2008 to 34% in 2011). Despite the decreases in unrecognized infection and increased HIV testing rates, reasons given by NHBS participants for not being tested for HIV during the past 12 months indicate that some MSM might benefit from prevention efforts that increase their awareness of personal risk and decrease the fear associated with being infected. Structural interventions that decrease the social stigma associated with being infected with HIV could help decrease the fear associated with being HIV-positive and improve HIV testing rates because HIV-related stigma might cause some men to delay testing to avoid the social stress resulting from HIV infection (18).

HIV-Positive MSM

The behaviors of HIV-positive men who are aware of their infection are particularly important in understanding

the impact and effectiveness of linkage to care programs and care and treatment promotion initiatives. Over half (61%) of HIV+ Black MSM report being offered partner notification services which is more often than their White and Hispanic counterparts. In the 2011 survey, HIV-positive Black MSM reported being on HIV antiretroviral therapy at the time of survey at relatively similar levels (84%) compared to White and Hispanic MSM (100% and 82%). This finding is particularly encouraging considering that in 2008, only 44% of Black HIV-positive MSM and 50% of Hispanic HIV-positive MSM reported being on HIV antiretroviral therapy. In 2008, 90% of White HIV-positive MSM reported being on HIV antiretroviral therapy. These findings largely mirror recently released national data that reports that 83% of HIV-positive individuals are on ART (22). Data collected from participants in the North American AIDS Cohort Collaboration on Research and Design Study between 2000 and 2008 also show an increase of 9% in the use of ART (from 74% to 83%, respectively ($p < .001$)) in people living with HIV in the U.S. The cohort of participants included MSM, among other risk group categories.

About 80% of the HIV-positive MSM overall had received a hepatitis vaccination though vaccination coverage decreased dramatically among Black and Hispanic MSM between 2008 and 2011. One recent policy change might increase the likelihood that men will receive a hepatitis vaccination. The Patient Protection and Affordable Care Act of 2010 expanded adult vaccination coverage by allowing individuals enrolled in group and individual health plans to have access (no copayment or other cost-sharing requirements) to ACIP-recommended vaccines, including those for hepatitis A and hepatitis B (23).

Health Care and Access

NHBS data demonstrated that while most MSM reportedly had a regular source of health care and had recently seen a health care provider, degrees to which people reported having health insurance differed substantially. Linkage to care efforts may be made more difficult unless disparities in insurance coverage lessen over time. Overall, it appears as if more health care providers are offering HIV tests to MSM in their care than has been done in the recent past. Concomitantly, the finding that Black MSM

report being more comfortable with their sexuality in the presence of their health care provider may be a sign that perceived stigma is lessening.

Sexual and Drug Use Behavior

Overall, sexual and drug use behaviors (including drug use before or during sex) remain high among MSM surveyed. Over half (54%) of all MSM reported having sex without a condom in the past year, while one-third reported not knowing the HIV status of their most recent male sex partner. Sexual transmission has been associated with nondisclosure of HIV infection with casual partners. Not discussing HIV status and not knowing a partner's HIV status were particularly common in the casual partnerships of the men surveyed. Efforts to improve communication skills related to HIV status and condom use with sexual partners might reduce the sexual transmission of HIV among MSM (19). Having sex while high or drunk was also reported frequently (43%), and MSM reported a median (average) of 3 male sex partners in the 12 months prior to the survey. Overall, Black MSM reported lower rates (than White or Hispanic MSM) of unprotected anal sex, sex with men of unknown status, and having sex under the influence of drugs or alcohol. This may suggest normative changes in perceived risk, better condom negotiation skills and even lessened stigma among Black MSM.

In general, illicit drug use was reported less frequently among Black MSM than White or Hispanic MSM. Also, unlike White and Hispanic MSM, the vast majority of Black MSM who reported using an illicit drug had used only a single type of drug in the past year, rather than polydrug use. The use of drugs such as crystal methamphetamine, powdered cocaine, and amyl nitrates (poppers) remains high among White and Hispanic MSM, especially when compared to Black MSM. These drugs, in particular, have been associated with high-risk sexual behaviors and HIV acquisition in previous studies (20). However, the relationship of drugs such as ecstasy (MDMA) and marijuana to high-risk sexual behaviors needs further exploration. The role of alcohol use in conjunction with sexual decision-making among MSM also needs elucidation. To continue to improve prevention efforts among MSM who use alcohol and drugs, data

are needed to monitor emerging substance-use trends to inform the development or modification of HIV behavioral interventions because alcohol and drug-use patterns among MSM and their impact on the HIV epidemic continue to change (21).

STI Testing and Diagnosis

To prevent STDs among sexually active MSM, US Centers for Disease Control and Prevention and CDPH recommends annual testing for syphilis, gonorrhea, and chlamydia. Just over half of the sexually active men in the survey had been tested for syphilis, gonorrhea or chlamydia during the past 12 months, which may reflect limited access to health care, discontinuity of care, or providers not following recommended guidelines for screening.

Behavioral Interventions

Of the men who reported participation in an individual- or a group-level intervention, a greater percentage were young or members of minority racial or ethnic groups. These findings suggest that these effective prevention programs are reaching the intended audience. However, only a small percentage of the men in the intended audience are being reached. As HIV prevention activities for MSM continue to be developed and implemented, NHBS will provide updated data on the delivery of these services and programs to the populations who most need them. This report indicates a critical need to expand HIV prevention for MSM, emphasizing a combination of cost-effective and evidence-based biomedical, behavioral, and structural approaches that can result in the greatest possible improvements in HIV incidence, access to care, and HIV-related disparities.

DISCUSSION: BLACK MSM IN CHICAGO

Black MSM in Chicago have not seen a decrease in annual HIV diagnoses in over a decade. Young Black MSM (under the age of 30) is the only subpopulation currently experiencing annual increases in diagnoses of HIV infection.

The results of the HIV behavioral surveillance survey over

both data collection cycles have found that the HIV prevalence among Black MSM far exceeds that of other race/ethnic groups in Chicago. In the 2011 NHBS survey, the HIV prevalence rate among Black MSM was double that of White MSM and triple that of Hispanic MSM. The disparities are even more pronounced among MSM less than 30 years old where the difference between Black and White MSM increases to more than double, and to over 5 times greater when compared to the youngest Hispanic MSM. While all race/ethnicity groups experienced increases in HIV prevalence from 2008 to 2011 HIV behavioral surveillance data; the increase among Black MSM was among the largest among the three groups.

Efforts to reduce the race and age-related disparities in prevalence and annual HIV diagnoses between young Black MSM and MSM of other ages and race/ethnicities must be intensified if we are to deliver on the promise of health equality and the hope of recent innovations in science and HIV prevention.

Almost two-thirds (64%) of young Black MSM reported having unprotected anal sex with another male in the past year. This rate is higher than the rate among older Black MSM as well as those among White and Hispanic MSM. Three-quarters (76%) reported having multiple male sex partners in the past year. Additionally, one-third of young Black MSM are using drugs or alcohol before or during sex and are unaware of the HIV status of their most recent casual sex partner. As reported by CDPH in 2009, there were no significant differences in sex and drug use behaviors that would readily account for the racial/ethnic disparities in HIV prevalence (24). The majority of male sex partners of young Black MSM are themselves of Black race, this intensifies their exposure risk as their sexual partners are themselves members of this high prevalence group (25). Young Black MSM are less frequently socializing in traditional brick-and-mortar venues (bars/clubs), which could impact ability of HIV prevention programs to effectively deliver outreach and prevention materials to them. Additionally, more needs to be understood about how sex partner selection occurs in non-bar/club settings and how partner selection could affect communication between partners about HIV status and condom use.

In looking for ways to halt the spread of HIV among young Black MSM it is also important to consider the social context in which these behaviors are occurring. NHBS Chicago data shows the tremendous burden that socio-economic and structural influences are having on a new generation of Black MSM. Recent homelessness was common among young Black MSM (18%), and double that of older Black MSM and 4 to 6 times greater than White and Hispanic MSM overall. Incarceration can quickly and easily destabilize one's housing and economic safety nets. Lifetime incarceration rates reported among young Black MSM (32%) are one-and-a-half times that of older Black MSM and 2 to 3 times higher than White and Hispanic MSM overall.

Over 13% of young Black MSM reported never graduating high school compared to 9% of older Black MSM or 1.3% of White MSM overall (10x lower than rate among young Blacks). Almost one-third of young Black MSM (30%) were living in poverty in 2011, which compares to 12% of older Black MSM, 11% of Hispanic MSM, and 5% of White MSM. The unemployment rate among young Black MSM was 27% in 2011. This compares to 15% among older Black MSM, and 10% among Black and Hispanic MSM in the 2011 survey sample. The impact of social and economic instability as demonstrated by these data can be devastating to the ability of individuals to stay healthy and on a community in need of mobilizing resources to affect normative changes. These barriers will provide the central challenges in linkage-to-care and adherence promotion campaigns targeting young Black MSM in Chicago.

Results of the 2011 NHBS-Chicago survey also suggests hopeful signs that, despite the barriers presented, the young Black MSM community and the HIV care and prevention systems have made critical improvements since 2008.

- Overall HIV testing rates have increased among Black MSM since 2008. In 2011, 71% of young Black MSM were reportedly testing often enough to meet the CDC HIV testing guidelines over the two years prior to the survey (at least one HIV test per year) compared to just over half of older Black MSM, and White and Hispanic MSM of all ages. More young Black MSM were reportedly 'out' about their sexual identity and likely are being offered HIV testing more often as part of their routine medical visits.
- In 2011, two-thirds (67%) of young Black MSM reported being recently tested for gonorrhea, chlamydia or syphilis. This rate is higher than the rate among older Black MSM, and White and Hispanic MSM overall.
- Availability and access to free condoms has also increased among Black MSM since 2008, and among young Black MSM is almost universal (91% reported receiving free condoms in the past year).
- In 2011, individual and group-level behavioral intervention efforts were reaching a larger percentage of Black MSM than in 2008. 40% of Black MSM engaged in an individual-level intervention (ILI) during 2011. This represents an over two-fold increase compared to 2008. An even higher proportion of young Black MSM (47%) reported participating in an ILI during the 2011 survey.

The two following indicators can be used to directly measure components of the linkage to care strategies being employed to ultimately increase the number of HIV+ MSM that know about their infection, are in sustained HIV medical care and ultimately have an undetectable HIV viral load.

- The proportion of young HIV+ Black MSM who were unaware of their HIV infection at the time of the survey has decreased dramatically since 2008. In 2011, 16% of young Black MSM were unaware of their HIV infection at the time of survey, compared to 38% in 2008.
- Among Black MSM diagnosed with HIV infection prior to the survey, almost double the proportion in 2011 reported being on anti-retroviral therapy at the time of the survey (84%) than in 2008 (44%).

The changes seen in these indicators hopefully portend decreased HIV transmission and diagnoses, and better linkage to care and more sustained treatment in upcoming years.

PUBLIC HEALTH RESPONSE

The Chicago Department of Public Health is dedicated to effectively and efficiently responding to the HIV/AIDS epidemic. CDPH recognizes the importance of community partnerships, education, and empowerment in the effort to prevent the spread of HIV. It is critical that CDPH further its collective understanding of the NHBS-Chicago MSM data and widely disseminate results to various community stakeholders. Toward that end, in partnership with agencies, individuals, and community groups, CDPH will conduct educational and solution-focused forums on this topic. CDPH will use analyses and reports to continue to inform future community planning processes and city-wide prevention strategies. A partial listing of current CDPH activities designed to stem the HIV epidemic among MSM follows.

[Chicago Enhanced Comprehensive HIV Prevention Plan \(ECHPP\)](#)

Under the City of Chicago's current HIV Prevention Plan, MSM are the highest-prioritized population for services. Additionally, CDPH funds over 26 community based organizations and coalitions to provide services to MSM across the City. CDPH also works closely with non-traditional partners to better understand and serve MSM living with and at risk for HIV. Direct services, social marketing campaigns and key partnerships with community leaders have further enhanced our ability to access and serve this population (26).

[Linkage to Care](#)

The CDPH HIV Prevention Program requires HIV Prevention funded agencies to directly link those newly diagnosed as HIV-positive to HIV care and services. In fact, a specialized linkage program for MSM youth ages 12-24 is funded with HIV Prevention Program funds. In addition, prevention-funded agencies are referring clients to CDPH partner services for partner elicitation, notification, and testing. Indeed, the HIV Prevention Program will debut partner services for all newly diagnosed HIV cases in Chicago regardless of diagnosis site.

[On-line Partner Notification](#)

The HIV Prevention Program along with the STI Partner Services Program has developed an innovative plan to provide individuals with opportunities for notifying their sexual partner(s) about possible exposure to HIV and other sexually transmitted infections via on-line communication. Many MSM use the internet to find potential partners and this service would provide an confidential manner in which these men could assist health department personnel in contacting those who may have been exposed to infection.

[Expanded Testing](#)

As a part of its efforts to increase HIV testing within African-American communities in Chicago, CDPH supported three of the largest 2012 LGBT summer events to provide free, on-site HIV tests, syphilis screening and hepatitis vaccination services. Elaborate and efficient "testing villages" attracted many MSM who then ob-

tained easy and accessible testing and prevention counseling, and vaccination.

Expanded Condom Distribution

CDPH has increased its free city-wide condom distribution from 3 million to 10 million condoms annually. To enhance condom distribution, the Chicago Community Condom Project works with hub sites that distributes condoms, community partners such as FQHCs and funded delegate agencies, and venues such as gay bars and barbershops. CDPH is in the planning stages to conduct targeted condom distribution in less well-known venues where MSM might congregate (private parties, roving events etc.), thus reaching those at higher risk for infection.

Special Projects

In 2011, CDPH HIV Prevention awarded funding to two MSM focused community based agencies to develop and implement special HIV prevention projects with the MSM population in the city. One project focuses on the development of mobile device based applications that allow African-American MSM to assess their risk for HIV and other sexually transmitted infections, and to provide real time resource and service directories for the City of Chicago. Another agency is implementing Keep It Up! (KIU!), which is a highly interactive, engaging, and culturally-relevant HIV prevention program tailored to ethnically diverse young MSM (27). KIU! makes extensive use of video, games, animation, and humor to help increase engagement and motivate behavior change by addressing peer norms, personal vulnerability, behavioral intentions, and pros/cons of condom use.

REFERENCES

1. CDPH. Healthy Chicago: A Public Health Agenda - Transforming the Health of our City. Chicago, IL: City of Chicago; August 2011. Available at <http://www.cityofchicago.org/city/en/depts/cdph/provdrs/healthychicago.html>. Accessed August 27, 2012.
2. CDPH. LGBT Community Action Plan. Chicago, IL: City of Chicago; March 2012. Available at http://www.cityofchicago.org/city/en/depts/cdph/supp_info/lgbt/lgbt_community_actionplan.html. Accessed August 27, 2012.
3. CDPH. STI/HIV Surveillance Report. Chicago, IL: City of Chicago; Fall 2011. Available at http://www.cityofchicago.org/city/en/depts/cdph/provdrs/sti_hiv_aids/svcs/get_sti_hiv_datainchicago.html. Accessed August 27, 2012.
4. Gallagher KM, Sullivan PS, Lansky A, Onorato IM. Behavioral surveillance among people at risk for HIV infection in the U.S.: the National HIV Behavioral Surveillance System. *Public Health Rep* 2007;(Suppl 1):32–8.
5. MacKellar D, Gallagher K, Finlayson T, Sanchez T, Lansky A, Sullivan PS. Surveillance of HIV risk and prevention behaviors of men who have sex with men: a national application of venue-based, time-space sampling. *Public Health Rep* 2007; (Suppl 1):39–48.
6. Allen DR, Finlayson T, Abdul-Quader A, Lansky A. The role of formative research in the National HIV Behavioral Surveillance System. *Public Health Rep* 2009;124:26–33.
7. Koblin BA, Husnki MJ, Colfax G, et al. Risk factors for HIV infection among men who have sex with men. *AIDS* 2006;20:731–9.
8. CDC. Revised recommendations for HIV testing of adults, adolescents, and pregnant women in health-care settings. *MMWR* 2006;55(No. RR-14):1–17.
9. CDC. Prevention of hepatitis A through active or passive immunization. *MMWR* 2006;55(RR-7).
10. CDC. A comprehensive immunization strategy to eliminate transmission of hepatitis B virus infection in the United States. *MMWR* 2006;55(No. RR-16).
11. Stall R, Hays R, Waldo C, Ekstrand M, McFarland W. The gay '90s: a review of research in the 1990s on sexual behavior and HIV risk among men who have sex with men. *AIDS* 2000;14:S1–S14.

12. Fleming DT, Wasserheit JN. From epidemiologic synergy to public health policy and practice: the contribution of other sexually transmitted diseases to sexual transmission of HIV infection. *Sex Transm Infect* 1999;75:3–17.
13. CDC. Sexually transmitted diseases treatment guidelines, 2010. *MMWR* 2010;59
14. Herbst JH, Sherba T, Crepaz N, et al. A meta-analytic review of HIV behavioral interventions for reducing sexual risk behaviors of men who have sex with men. *J Acquir Immune Defic Syndr* 2005;39:228–41.
15. CDC. Evaluating CDC-funded health department HIV prevention programs. Atlanta, GA: CDC; 1999. Available at http://www.cdc.gov/hiv/topics/evaluation/health_depts/guidance. Accessed September 15, 2011.
16. CDC. Establishing a Holistic Framework to Reduce Inequities in HIV, Viral Hepatitis, STDs, and Tuberculosis in the United States. Atlanta (GA): U.S. Department of Health and Human Services, Centers for Disease Control and Prevention; October 2010.
17. Lansky A, MacKellar D, Gallagher KM, Lin LS, Sullivan PS, Onorato IM. [Untitled letter]. *Sex Transm Dis* 2006;33:272-3. Doi: 10.1097/01.olq.0000215745.61542.d4.
18. Chesney MA, Smith AW. Critical delays in HIV testing and care: the potential role of stigma. *Am Behav Sci* 1999;42:1162–74.
19. Chesney MA, Koblin BA, Barresi PJ, et al. An individually tailored intervention for HIV prevention: baseline data from the EXPLORE Study. *Am J Public Health* 2003;93:933–8.
20. Colfax G, Coates TJ, Husnik MJ, Huang Y, Buchbinder S, Koblin B, Chesney M, Vittinghoff E; EXPLORE Study Team. (2005) Longitudinal patterns of methamphetamine, popper (amyl nitrite), and cocaine use and high-risk sexual behavior among a cohort of San Francisco men who have sex with men. *J Urban Health* 2005; 82(1 Suppl 1):i62-70
21. Lambert E, Normand J, Stall R, Aral S, Vlahov D. Introduction: new dynamics of HIV risk among drug-using men who have sex with men. *J Urban Health* 2005;82(Suppl 1):i1–8. Doi: 10.1093/jurban/jti018.
22. Althoff KN, Buchacz K, Hall HI, et. al. US Trends in Antiretroviral Therapy Use, HIV RNA Plasma Viral Loads, and CD4 T-Lymphocyte Cell Counts Among HIV-Infected Persons, 2000 to 2008. *Annals of Internal Medicine* 2012;157(5):325-335.
23. The Patient Protection and Affordable Care Act of 2010. Pub. L. No. 111–148, 124 Stat. 119.

24. CDPH. HIV Prevalence and Unrecognized HIV Infection Among Men Who Have Sex With Men: Chicago HIV Behavioral Surveillance, 2008 - Exploring Racial/Ethnic Disparities in Levels of HIV Infection. Chicago, IL: City of Chicago; July 2009. Available at http://www.cityofchicago.org/content/dam/city/depts/cdph/statistics_and_reports/STIHIVAIDSSpecRepMSMPPrev7302009.pdf. Accessed August 27, 2012.
25. Raymond H, McFarland W. Racial Mixing and HIV Risk among Men Who Have Sex with Men. *AIDS Behavior*, 2009 Aug;13(4):630-7.
26. CDPH. 2010-2011 Chicago Comprehensive HIV Prevention Plan. Chicago, IL: City of Chicago; January 2010. Available at http://www.cityofchicago.org/content/dam/city/depts/cdph/infectious_disease/STI_HIV_AIDS/ID_ComprehensiveHIVPrevPlan20102011.pdf. Accessed August 27, 2012.
27. O'Donnell L, Bonaparte B, Joseph H, Agronick G, Leow DM, Myint-U A, Stueve A. Keep It Up: development of a community-based health screening and HIV prevention strategy for reaching young African American men. *AIDS Educ Prev*. 2009 Aug;21(4):299-313.

Visit us online



www.CityofChicago.org/Health



www.facebook.com/ChicagoPublicHealth



Twitter @ChiPublicHealth



<http://gplus.to/ChiPublicHealth>