

Howard Brown Health Center

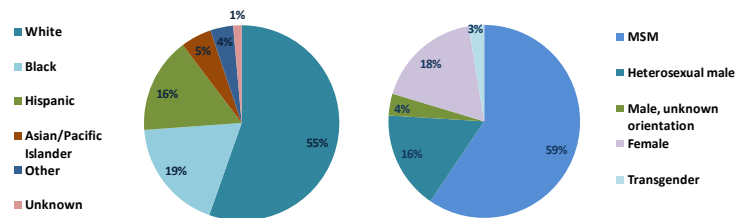


STI Annual Report, 2010

Background

- ◆ Howard Brown is the largest LGBT health center in the Midwest, providing comprehensive medical and behavioral health services to over 36,000 adults and youth each year.
- ◆ Howard Brown serves a diverse population in Chicago and the surrounding areas, with over 300 different zip codes in Illinois and over 100 zip codes from outside Illinois represented.
- ◆ STI morbidity varies by venue. In 2010, the majority of new syphilis cases were diagnosed through primary care and the syphilis testing clinic. The majority of gonorrhea and chlamydia cases were diagnosed through the STI walk-in clinic and at the Broadway Youth Center.

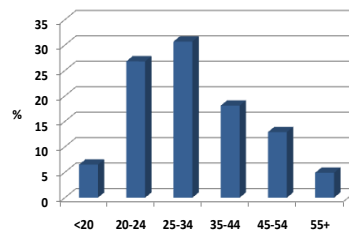
Howard Brown STI Clients by Race/Ethnicity, Gender, and Sexual Orientation



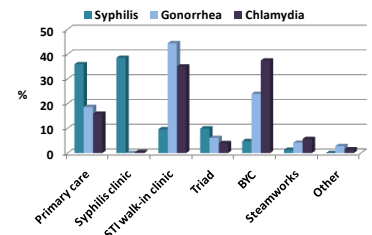
Data Sources:

- ◆ From 2000 until 2008 Howard Brown was the Chicago site for the MSM Prevalence Monitoring Project, a national multisite study that collected detailed information on demographic, behavioral risk, and STI testing among MSM.
- ◆ 2009 was the first year that Howard Brown participated in the "Sexually Transmitted Diseases Surveillance Network (SSuN)" Project, an ongoing CDC sentinel surveillance project. The goal of SSuN is to provide a more comprehensive picture of the STI burden in the U.S., by collecting standardized information on STIs and related behaviors among demographically and geographically diverse groups, including MSM, women, and youth.
- ◆ HIV surveillance data were collected from clients seeking anonymous HIV testing at the walk-in clinic at Howard Brown and at the BYC.

STI Clients by Age



STI Morbidity by Testing Venue



Abbreviations:

BYC: Broadway Youth Center; DIS: Disease Intervention Specialist; LGBT: Lesbian, Gay, Bisexual, and Transgender; MSM: Men who Have Sex with Men; P&S: Primary and Secondary Syphilis; STI: Sexually Transmitted Infection

2010 Highlights

- ◆ In 2010, 8,172 tests for syphilis, 7,315 tests for gonorrhea, and 6,714 tests for chlamydia were performed among 7,797 individuals who sought care through Howard Brown's walk-in STI clinic, syphilis testing clinic, primary care, Triad, the Broadway Youth Center, and Steamworks.
- ◆ Syphilis continued to increase in 2010, with 312 new cases, of which 164 were P&S. Gonorrhea and chlamydia also increased for the second consecutive year.
- ◆ The disproportionate impact of STIs and HIV on MSM, youth, and persons of color underscores the need for effectively targeted prevention and education programs that address these health disparities.

STI Testing and Positivity, 2009-2010

	2009			2010		
	Tests	Positive	%	Tests	Positive	%
Gonorrhea	6119	263	4.3	7315	360	4.9
Chlamydia	5860	355	6.1	6714	454	6.8
Syphilis (P&S)	6859	269 (136)	3.9 (2.0)	8172	312 (164)	3.8 (2.0)

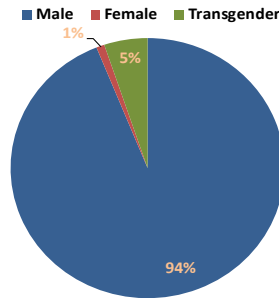
STI Diagnoses, 2009-2010

	2009	2010	% increase
Gonorrhea	263	360	37%
Chlamydia	355	454	28%
All stage syphilis	269	312	16%
P&S syphilis	136	164	21%

Syphilis

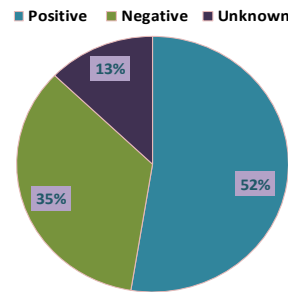
- ◆ After declining to an all-time low in 2000, increasing rates of syphilis have been observed in Chicago and other cities throughout the U.S., a trend which has largely been driven by increases among MSM.
- ◆ MSM account for the majority of new syphilis cases at Howard Brown. In 2010, 94% of new cases were male and 97% of males identified as MSM. In 2009, there was a substantial increase in syphilis among young transgender women, with 10 new cases reported compared to only 2 cases in the previous 3 years combined. In 2010, transgender women accounted for 5.1% (16/312) of new syphilis cases.
- ◆ Syphilis increases the risk of HIV transmission, and HIV infection can complicate the clinical management of syphilis in co-infected patients. In 2010, 52% of persons with newly diagnosed syphilis were HIV-infected.
- ◆ Recent data show that young black and Hispanic MSM account for an increasing proportion of new syphilis diagnoses. In 2010, nearly 20% of men diagnosed with syphilis were under the age of 25. The median age at diagnosis was 38, 28, and 32 for white, black, and Hispanic MSM respectively.
- ◆ Racial disparities in rates of syphilis are most pronounced among young MSM. Although black MSM represented 9% of the patient population at Howard Brown in 2010, they accounted for 25% of new cases of syphilis.
- ◆ Although the number of primary syphilis cases remained stable between 2008 and 2010, there were substantial increases in secondary and early latent syphilis. Because the likelihood of transmission is greatest during the primary stage, early detection and treatment is important for interrupting the spread of infection. Frequent testing is important for individuals at risk of infection, particularly since symptoms are often unnoticed or unrecognized during the primary stage.
- ◆ DIS play an integral role in the management and follow-up of patients with syphilis. In 2010, 98% of syphilis cases were interviewed by DIS. DIS elicited 676 partners from 324 interviewed cases; of these, 615 (91%) were successfully notified, and 72% had a documented test for syphilis. 56 newly infected cases were identified; 224 were preventatively treated due to recent exposure; and 111 were tested for syphilis and found to be negative.

Syphilis Cases by Gender, 2010

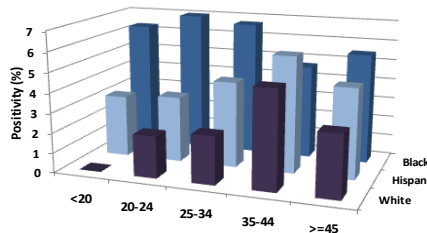


*97% of male cases were MSM

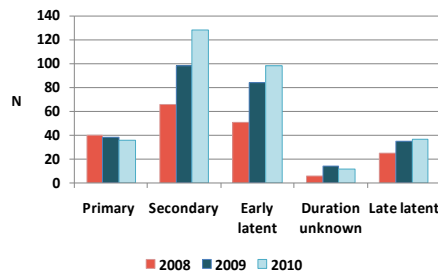
Syphilis Cases by HIV Status, 2010



Syphilis Positivity by Race/Ethnicity and Age, 2010

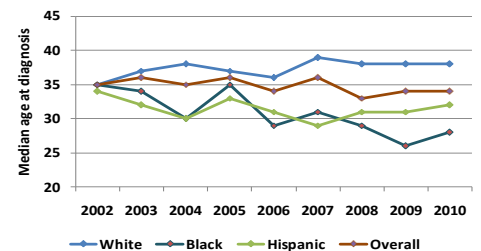


Syphilis Cases by Stage at Diagnosis, 2008-2010

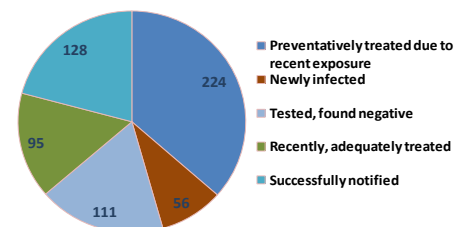


- ◆ Among clients for whom data on behavioral risk were available, infection with syphilis was more common among MSM who reported use of methamphetamine, erectile dysfunction drugs (such as Viagra, Cialis, or Levitra), and poppers in the previous year compared to those who did not report use of these substances.
- ◆ MSM who had used methamphetamine in the past year had over 3 times the odds of being diagnosed with syphilis than MSM who did not report meth use (7.5% vs. 2.5%). MSM who reported use of erectile dysfunction drugs had over twice the odds of being infected with syphilis, and those who used poppers had 1.6 times the odds of being infected.
- ◆ Some studies have shown associations between anonymous sexual encounters, and meeting sex partners online or at bathhouses and syphilis infection in MSM. Although 53% of MSM diagnosed with syphilis reported meeting a partner online in the past year, 20% met partners at a bathhouse, and 57% reported anonymous partners, these were not associated with an increased odds of infection compared to men not reporting these behaviors.

Median Age at Diagnosis among New Syphilis Cases: MSM, 2002-2010



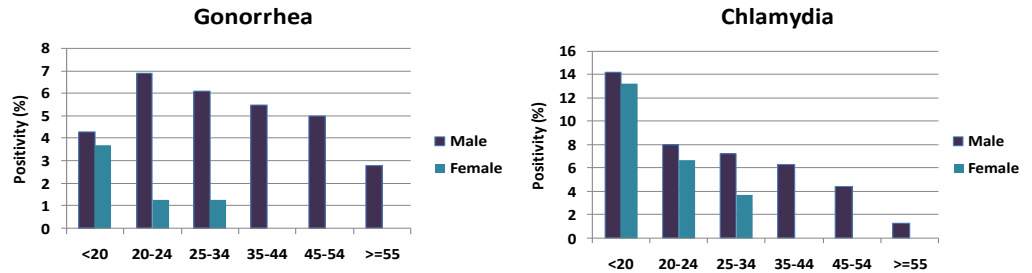
Dispositions of Partners Interviewed for Syphilis Exposure, 2010



Gonorrhea & Chlamydia

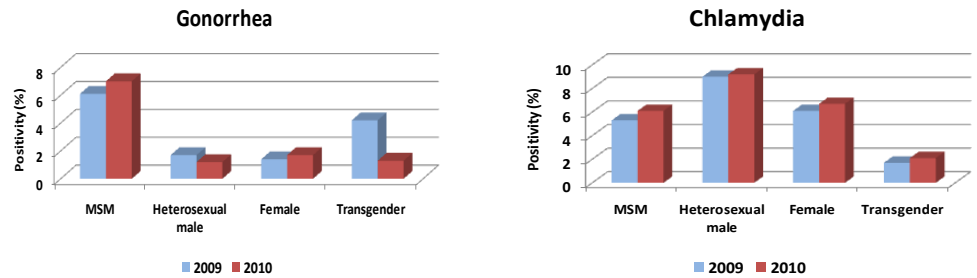
- Rates of gonorrhea are highest among males aged 20-24, and higher among males than females in all age groups. Higher positivity among males may reflect the fact that males are more likely to have symptoms of gonorrhea. In general, a high male-to-female ratio is reflective of transmission among MSM, though this also reflects the high proportion of males seeking testing at Howard Brown.

Gonorrhea and Chlamydia Positivity by Age and Gender, 2010



- Chlamydia positivity is highest among youth under the age of 20, and declines with age. Gender disparities are low among persons under 25, suggesting that transmission among youth is mostly through heterosexual contact; the gender gap increases among older individuals.

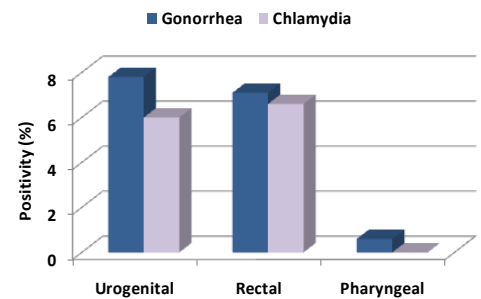
Gonorrhea and Chlamydia Positivity by Gender and Sexual Orientation, 2009-2010



- In 2010, 360 cases of gonorrhea and 454 cases of chlamydia were reported among clients at Howard Brown, reflecting a 37% and 28% increase in morbidity from 2009. Chlamydia positivity increased in all gender groups between 2009 and 2010. Gonorrhea positivity declined in heterosexual males and transgender individuals, but increased in MSM and women.

tially underestimated. However, due to the high proportion of rectal and pharyngeal infections that are asymptomatic, screening for extra-genital infections is important for interrupting transmission among persons with exposures at these sites, and has been shown to detect substantial numbers of cases that would be missed by urogenital screening alone. In November 2010, in collaboration with the Illinois Department of Health and the University of Illinois Chicago, Howard Brown began a study to validate the use of nucleic-acid amplification testing—which is currently used to screen for urogenital infections—for screening for rectal and pharyngeal gonorrhea and chlamydia. Once validated, this test will become the standard of care at the clinic.

Gonorrhea and Chlamydia Positivity by Anatomic Site: MSM, 2010

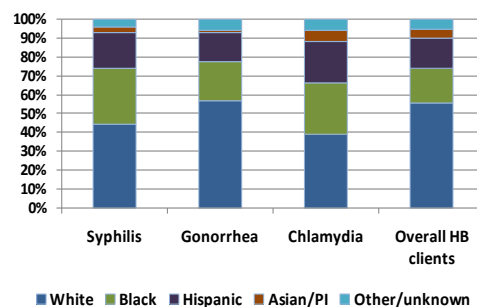


- Howard Brown does not routinely screen for gonorrhea and chlamydia at extra-genital sites due to limitations in available test technology, so the true burden of these infections in MSM is thought to be substan-

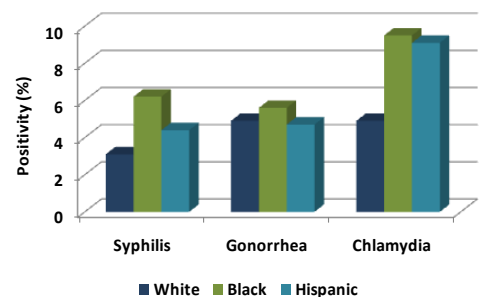
Racial Disparities

- Racial and ethnic disparities in rates of STIs and HIV persist in the United States in the absence of differences in risk behavior by race/ethnicity. Reasons for these disparities are complex and likely result from differences in sexual mixing patterns and background prevalence that allow for reservoirs of infection to persist within communities, as well as macro-level sociocultural and structural factors.

Proportionate STI Morbidity by Race/Ethnicity, 2010



STI Positivity by Race/Ethnicity, 2010



HIV

◆ In 2010, Howard Brown provided anonymous HIV testing for over 6,200 clients at the walk-in clinic at Sheridan Road and at the BYC, and identified 112 HIV infections.

◆ Ulcerative STIs (such as syphilis and herpes) and non-ulcerative STIs (including gonorrhea and chlamydia) have been shown to increase the risk of HIV acquisition by 2 to 5 times, and STIs represent risk behaviors that also increase the risk of HIV transmission. Prompt detection and treatment of STIs is important for reducing the risk of HIV transmission, in addition to interrupting transmission to partners and preventing long-term sequelae.

◆ Among MSM for whom information on behavioral risk was available, the odds of HIV infection was nearly 3 times greater among men who reported that they had been diagnosed with an STI in the previous year than among those who had not.

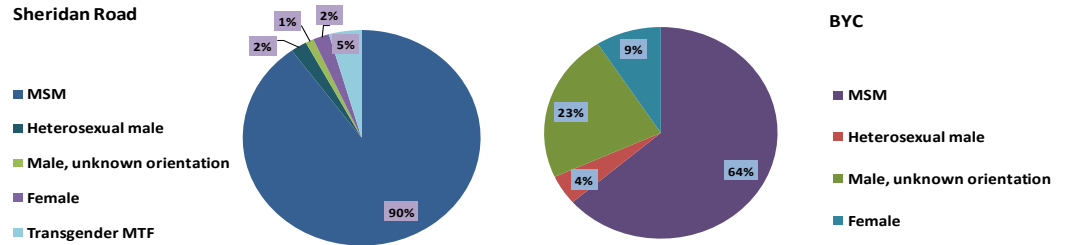
◆ MSM account for over half of new HIV infections in the U.S., and they are the only group in which HIV incidence is still increasing. At Howard Brown in 2010, HIV positivity among MSM was 13.5 times that among heterosexual men and 9 times that among women.

◆ Like other STIs, racial disparities in rates of HIV persist in the U.S., and these disparities are particularly pronounced among young MSM. At Howard Brown, among MSM under age 25 the HIV positivity among black MSM was 3 times that among white MSM and over 2 times that among Hispanic MSM.

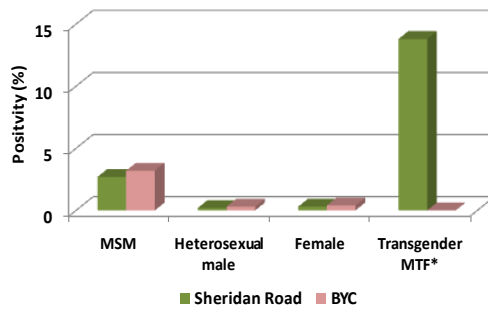
◆ At Sheridan Road, nearly a quarter of individuals (21/90) diagnosed with HIV were under the age of 25. An additional 22 youth were diagnosed with HIV at the BYC, 5 of whom were under age 20.

◆ Interventions that are tailored to the needs of young MSM of color and additional research to provide a better understanding of the reasons for these health disparities are urgently needed.

New HIV Diagnoses by Gender & Sexual Orientation, Sheridan Road and BYC: 2010

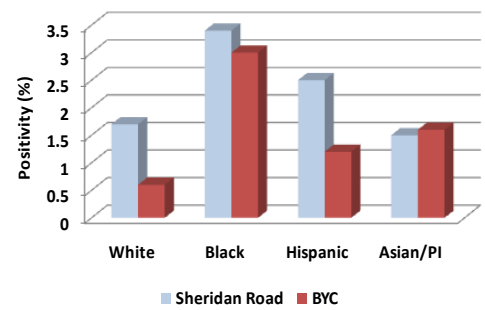


HIV Positivity by Gender & Sexual Orientation, 2010

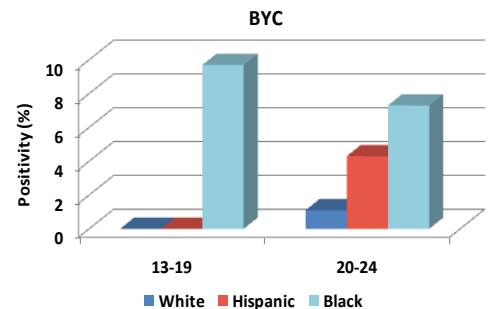
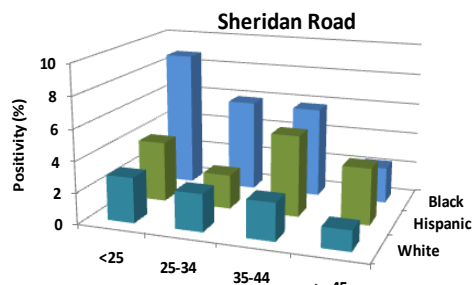


*Positivity estimate based on small numbers

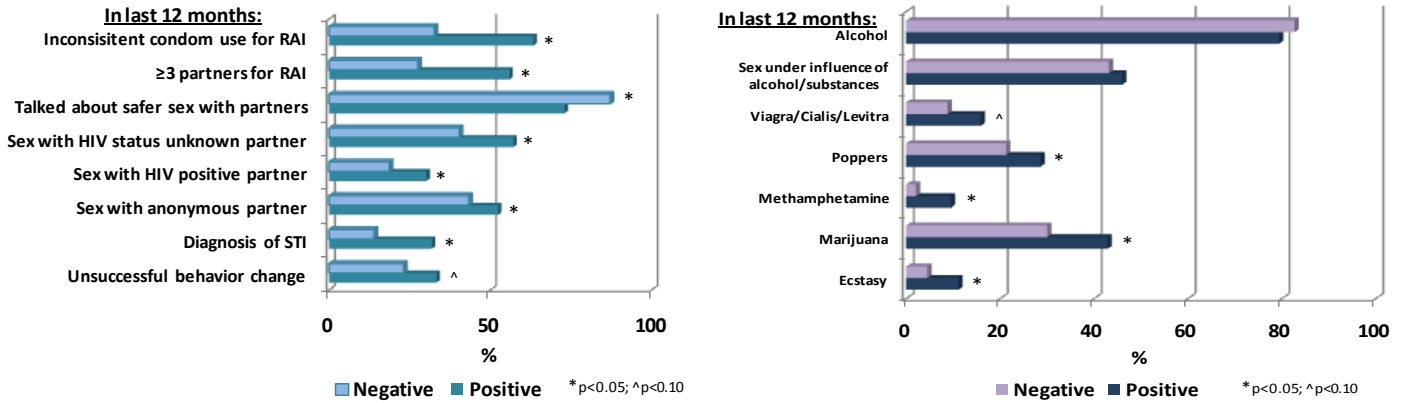
HIV Positivity by Race & Ethnicity, 2010



HIV Positivity by Race/Ethnicity and Age: MSM, 2010



Selected Risk Behaviors and Substance Use among MSM by HIV Status, 2010†



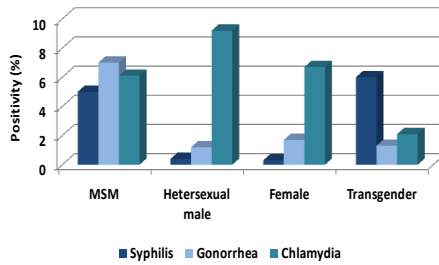
†Information on behavioral risk was available only from clients tested at Sheridan Road.

- ◆ Among MSM seeking anonymous HIV testing at the walk-in clinic at Sheridan Road, risks for HIV infection included inconsistent condom use for receptive anal intercourse (RAI), having RAI with 3 or more partners in the past year, sex with an HIV-positive partner, sex with a partner of unknown serostatus, sex with an anonymous partner, diagnosis of STI in the prior year, and use of poppers, erectile dysfunction drugs, ecstasy, marijuana, and methamphetamine. Talking about safer sex or condoms prior to having sex was associated with a lower risk of HIV.

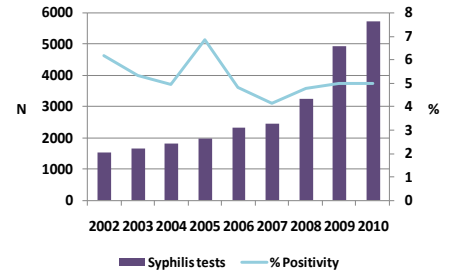
MSM

- ◆ MSM account for disproportionate STI and HIV morbidity in the United States. Although MSM comprise only an estimated 4% of adult males in the US and 2% of the population overall, in 2008 they accounted for 63% of all P&S syphilis cases and over half of new HIV infections.
- ◆ MSM account for a substantial proportion of overall STI morbidity at Howard Brown, although this partially reflects the fact that MSM comprise the majority of the patient population. In 2010, MSM accounted for 97% of syphilis, 92% of gonorrhea, and 65% of chlamydia diagnoses among males at Howard Brown.
- ◆ Recent declines in positivity may reflect increases in testing and changes in data collection methods and not actual declines in morbidity. However, despite expanded screening, there were increases in syphilis between 2008 and 2009, and gonorrhea and chlamydia positivity increased sharply in 2010 after having remained relatively stable for several years. These trends highlight the need for continued screening and effectively targeted interventions for MSM.

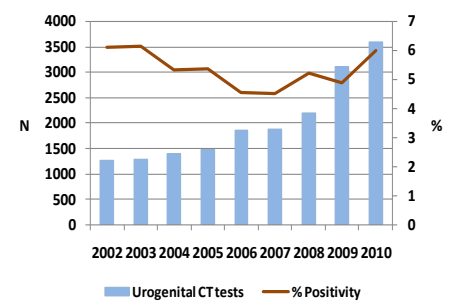
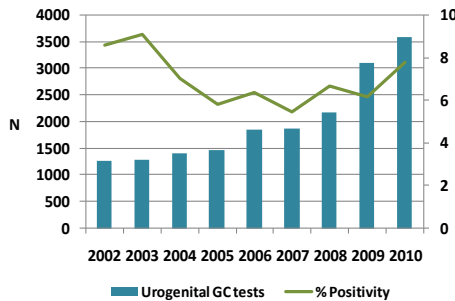
STI Positivity by Gender and Sexual Orientation, 2010



Syphilis Testing and Positivity: MSM, 2002-2010

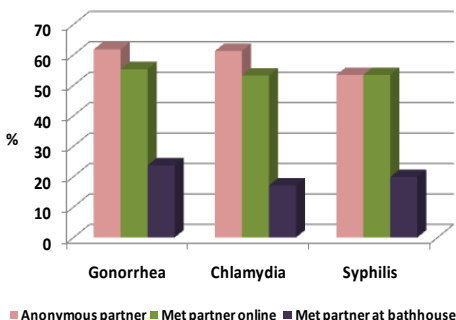


Urogenital Gonorrhea and Chlamydia Testing and Positivity: MSM, 2002-2010

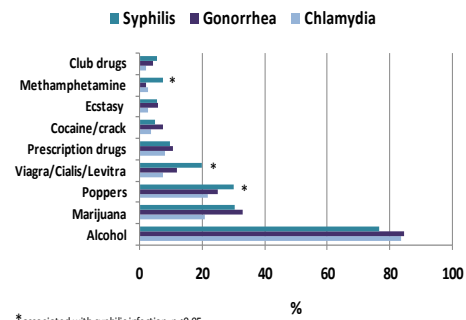


- ◆ Studies have linked alcohol and substance use to increased sexual risk taking, STIs, and HIV. Among MSM for whom information on behavioral risk was available, syphilis infection was associated with use of methamphetamine, poppers, and erectile dysfunction drugs, though gonorrhea and chlamydia were not associated with use of these substances.
- ◆ Although some studies have shown associations between anonymous sexual encounters, meeting sex partners online or at bathhouses, and STIs, the prevalence of STIs was similar among MSM who reported these behaviors and those who did not.

Selected Risk Behaviors among MSM by STI, 2010



Reported Substance Use among MSM by STI, 2010



Interpreting Data

Measures:

- ◆ Positivity refers to the total number of new diagnoses divided by the total number of tests performed. Positivity is a function of the number of tests performed and the burden of infection within a given subgroup.
- ◆ STI and HIV positivity rates are based on new diagnoses of STIs and HIV and not necessarily newly acquired infections.

Caveats:

- ◆ Results may not be generalizable to other groups because they reflect morbidity for a specific population, namely individuals who sought STI or HIV testing at a LGBT-focused health center.
- ◆ Small numbers can make calculations of rates unstable and make it difficult to accurately compare subgroups.
- ◆ Changes in data collection methods make examination of trends over time difficult. For example, apparent increases in testing and morbidity may to some extent reflect better reporting and not actual changes in morbidity.
- ◆ Information on sexual risk behaviors, substance use, and STI history was based on patient self-report and may have been underestimated. Information on risk taking was not available for primary care patients or clients at the BYC.

Acknowledgements

We would like to acknowledge the contributions of the many medical providers, nurses, medical assistants, lab staff, DIS, test counselors, outreach workers, patient services representatives, interns, and volunteers who helped make this report possible. Special thanks to Daniel Pohl for providing DIS program statistics, Jeremy Carr for his assistance with data extraction, and Cameron Estrich, Krystal Madkins, and Lance Wolfe for their help with data entry. We would also like to acknowledge our collaborators at the Centers for Disease Control and Prevention, the Chicago and Illinois Departments of Public Health, and the University of Illinois at Chicago.

More Information

For more information, visit Howard Brown online: www.howardbrown.org

Suggested citation:

Hotton A, Gratz B. *Howard Brown Health Center: STI Annual Report, 2010* Chicago, IL 2010.

Funding sources:

Centers for Disease Control and Prevention (CDC-RFA-PS08-865). Sexually Transmitted Diseases Surveillance Network (SSuN), 2009-present.

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