2011 STI ANNUAL REPORT
EXECUTIVE SUMMARY
2011 STI Annual Report  
Executive Summary

Howard Brown Health Center’s (HBHC) third Annual STI Report details sexually transmitted infection (STI) and human immunodeficiency virus (HIV) testing and behavioral trends at many of HBHC clinical locations, and highlights the significant public health role that Howard Brown plays in Chicago and the greater Midwest. Data for this report was collected as part of two national, CDC-funded sentinel surveillance projects: the MSM Prevalence Monitoring Project from 2000-2008, and the Sexually Transmitted Diseases Surveillance Network (SSuN) from 2009-present.

This report documents recent trends in STI and HIV testing and positivity among clients at Howard Brown Health Center and examines variation in STI and HIV positivity by age, race/ethnicity, and gender and sexual orientation, highlighting the disproportionate impact of STIs and HIV on MSM, youth, and persons of color. In 2011, Howard Brown Health Center provided STI testing to over 8,200 individuals at its walk-in STI and primary care clinic at the Sheridan Road headquarters, Triad Health Practice, the Broadway Youth Center, and outreach locations in greater Cook County. Over 7,200 anonymous HIV tests identified 132 HIV infections, a positivity rate of 1.8%. The total number of reported cases of gonorrhea and Chlamydia increased for the third consecutive year. Syphilis also continued to increase at HBHC in 2011, from 312 cases in 2010 to 351 cases in 2011, the highest number of reported cases since 2000. This trend mirrors data reported in Chicago and other U.S. cities, where increases in syphilis, particularly among men who sleep with men (MSM), have been observed over the past decade. Cook County, IL, reported the highest number of primary and secondary syphilis cases in the U.S. in 2010, and Howard Brown Health Center diagnoses more cases of syphilis than any other clinic in the county.

We believe this report illustrates some of the sexual health challenges facing the LGBT community, and demonstrates the leading role that Howard Brown Health Center plays in confronting these issues on a daily basis. We hope you find the report helpful and welcome comments to improve future versions.

Sincerely

Anna Hotton, PhD, MPH and Beau Gratzer, MPP
Howard Brown Health Center

STI Annual Report, 2011

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 2011, 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.

Data Sources:

- From 2000 through 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.

2011 Highlights

- In 2011, 9,007 tests for syphilis, 7,899 tests for gonorrhea, and 7,355 tests for chlamydia were performed among 8,273 individuals who sought care at Howard Brown’s walk-in STI clinic, syphilis testing clinic, primary care, Triad, the Broadway Youth Center, and Steamworks.
- Syphilis continued to increase in 2011, with 351 new cases, of which 164 (47%) were P&S. The number of reported cases of gonorrhea and chlamydia also increased for the third 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, 2009-2011

<table>
<thead>
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<th>2009</th>
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<tr>
<td><strong>Tests</strong></td>
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<td>269</td>
<td>312</td>
<td>351</td>
<td>+14%</td>
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<tr>
<td>P&amp;S syphilis</td>
<td>136</td>
<td>164</td>
<td>160</td>
<td>+10%</td>
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STI Diagnoses, 2009-2011

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<th></th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>Avg % change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gonorrhea</td>
<td>263</td>
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<td>160</td>
<td>+10%</td>
</tr>
</tbody>
</table>
Syphilis

- After declining to an all-time low in 2000, increasing rates of syphilis have been observed in Chicago and other U.S. cities, a trend largely driven by increases among MSM. In 2010, Cook County reported the highest number of P&S syphilis cases in the U.S. In Chicago, the number of P&S cases increased by 61% between 2008 and 2010, with the highest number of total cases reported in over a decade since the beginning of the current syphilis epidemic in MSM.

- MSM account for the majority of new syphilis cases at Howard Brown. In 2011, 96% of new cases were male and 98% of males identified as MSM. In 2009, there was a substantial increase in syphilis among young trans-gender women, with 10 new cases reported compared to only 2 cases in the previous 3 years combined. Transgender women accounted for 5.1% (16/312) of new syphilis cases in 2010 and 4.0% (14/351) in 2011.

- Syphilis increases the risk of HIV transmission, and HIV infection can complicate the clinical management of syphilis in co-infected patients. In 2011, 57% of persons with newly diagnosed syphilis were HIV-infected.

- Although black MSM represented 9.5% of the patient population at Howard Brown in 2011, they accounted for 28% of new cases of syphilis. Recent data show that young black and Hispanic MSM account for an increasing proportion of new syphilis diagnoses. In 2011, 23% of men diagnosed with syphilis were under the age of 25, and racial disparities in rates of syphilis were most pronounced among young MSM.

- Although the number of primary syphilis cases remained stable between 2008 and 2011, 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 at-risk individuals, 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 2011, DIS elicited 613 sex partners from 349 interviewed cases. 88% of sex partners who were assigned to HBHC DIS were successfully reached and notified of their syphilis exposure. 42 newly infected cases were identified and brought to treatment; 200 were preventatively treated due to recent exposure; and 86 tested negative for syphilis.

- MSM who were diagnosed with syphilis were more likely to report use of methamphetamine, erectile dysfunction drugs (such as Viagra, Cialis, or Levitra), marijuana, and poppers in the previous year compared to those who were not.

- 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. MSM who reported use of erectile dysfunction drugs or poppers had over twice the odds of being infected with syphilis than those who did not.

- Some studies have shown associations between anonymous sexual encounters, and meeting sex partners online or at bathhouses and syphilis infection in MSM. Although 50% of MSM diagnosed with syphilis met a sex partner online in the past year and 61% reported anonymous partners, these were not associated with an increased odds of infection. However, men diagnosed with syphilis were more likely than those who were not to report meeting partners at a bathhouse (24% vs. 17%; p=0.01)
Gonorrhea & Chlamydia

- Rates of gonorrhea are highest among males under 20 years of age, 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.

- Chlamydia positivity is highest among women under the age of 20, and declines with age, with higher rates among women under 25 than men.

- In 2011, 400 cases of gonorrhea and 532 cases of chlamydia were reported among clients at Howard Brown, reflecting an 11% and 17% increase in morbidity from 2010. Chlamydia positivity increased in all gender groups except MSM between 2010 and 2011. Gonorrhea positivity declined slightly in females, remained stable in MSM, and increased in heterosexual males and transgender individuals from 2010 to 2011.

- Failure to screen for extra-genital gonorrhea and chlamydia infections in MSM can substantially underestimate the true prevalence of these infections. Because a large proportion of rectal and pharyngeal infections 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. From November 2010-December 2011, in collaboration with the Illinois Department of Health and the University of Illinois Chicago, Howard Brown took part in a study to validate the use of nucleic-acid amplification testing (NAAT) for screening for rectal and pharyngeal gonorrhea and chlamydia. Positivity for rectal and pharyngeal gonorrhea and rectal chlamydia was 2-3 times higher than urogenital positivity, and NAAT tests detected significantly more infections than the tests previously in use.

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.
HIV

♦ In 2011, Howard Brown provided anonymous HIV testing for over 6,300 clients at the walk-in clinic at Sheridan Road and at the BYC, and indentified 120 HIV infections. Additionally, over 850 HIV tests were performed at outreach locations in Chicago and surrounding suburbs, with 12 HIV infections identified. Overall positivity was 1.8%; 2.0% at Sheridan; 1.4% at BYC; and 1.4% at outreach.

♦ 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 HIV transmission risk, in addition to interrupting STI 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 2 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 2011, HIV positivity among MSM was 15.5 times that among heterosexual men and 31 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, overall HIV positivity among black and Hispanic MSM was 2 to 3 times that among white MSM, with more marked disparities among youth under age 25.

♦ At Sheridan Road, 22% of individuals (23/103) diagnosed with HIV were under the age of 25. An additional 17 youth were diagnosed with HIV at the BYC.

♦ Interventions that are tailored to the needs of young MSM of color and research to understand the causes of these health disparities are urgently needed.

*Positivity estimate based on small numbers*
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 2011, MSM accounted for 98% of syphilis, 89% of gonorrhea, and 61% 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.

- 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, sex with an HIV-positive partner, being diagnosed with an STI, and use of methamphetamine in the 12 months prior to testing.

†Information on behavioral risk was available only from clients tested at Sheridan Road.
Studies have linked alcohol and substance use to increased sexual risk taking, STIs, and HIV. Among MSM, a number of substances were associated with increased STI risk, including methamphetamine, poppers, marijuana, erectile dysfunction drugs, ecstasy, club drugs, and cocaine. Alcohol use was nearly ubiquitous but was not associated with increased STI risk, though this may reflect lack of sensitivity in measurement.

Although approximately 50% of MSM surveyed at the STI walk-in clinic met a sex partner online and nearly 60% reported anonymous partners in the past year, the prevalence of these behaviors was not statistically different among those diagnosed with STIs than among those who were not.

**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**

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**More Information**

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

Previous versions of this report can be found at:

http://www.howardbrown.org/hb_services.asp?id=152


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