



HEALTHY CHICAGO SPECIAL SURVEILLANCE REPORT

SYPHILIS IN CHICAGO AND THE PUBLIC HEALTH RESPONSE

DECEMBER, 2011



City of Chicago
Mayor Rahm Emanuel



Chicago Department of Public Health
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DEPARTMENT OF PUBLIC HEALTH
CITY OF CHICAGO



Dear Residents,

The Chicago Department of Public Health is dedicated to partner with the community to promote best practices to promote the health and well-being of Chicagoans. Sexually Transmitted Infection (STI) prevention and control are top priorities for the department, outlined in the public health agenda for the City of Chicago, Healthy Chicago.

This Special Surveillance report provides a detailed picture of syphilis in Chicago and lays the foundation for where we need to focus our efforts. In 2010, there were 686 people diagnosed with syphilis, an increase of 23% compared to 2009. We have to reverse this trend.

We know that early detection with treatment, public awareness and working collaboratively with partners have been key in reducing the number of syphilis cases in the past. We are concerned with these numbers and in response, are working with the most affected populations and taking a multipronged approach. CDPH is implementing new measures as well as strengthening existing programs aimed at raising public awareness about syphilis and increasing, prevention, education and routine testing. You can read more about them in this report.

It is important to remind everyone that syphilis is a curable and treatable condition, but when left untreated it can cause serious health complications. Syphilis is commonly overlooked and may be confused with other conditions. That is why we are encouraging residents to get tested. There are multiple places throughout the city that offer free testing and treatment. You can visit www.gettestedchicago.com for information or call 1-800-AID-AIDS (243-2437)

Sincerely,

Dr. Bechara Choucair
Commissioner
Chicago Department of Public Health

About Syphilis

Syphilis is a sexually transmitted infection (STI). It has often been called “the great imitator” because so many of the signs and symptoms are indistinguishable from those of other diseases.

Many people infected with syphilis do not have any symptoms for years, yet remain at risk for late complications if they are not treated. Although transmission occurs from persons with sores who are in the primary or secondary stage, many of these sores are unrecognized. Thus, transmission may occur from persons who are unaware of their infection.

Genital sores (chancres) caused by syphilis make it easier to transmit and acquire HIV infection sexually. There is an estimated 2 to 5 fold increased risk of acquiring HIV if exposed to that infection when syphilis is present.

Syphilis is divided into four stages (primary, secondary, latent, and tertiary), reflecting the clinical progression of disease. For information on the stages of syphilis go to www.gettestedchicago.com (hotlink)

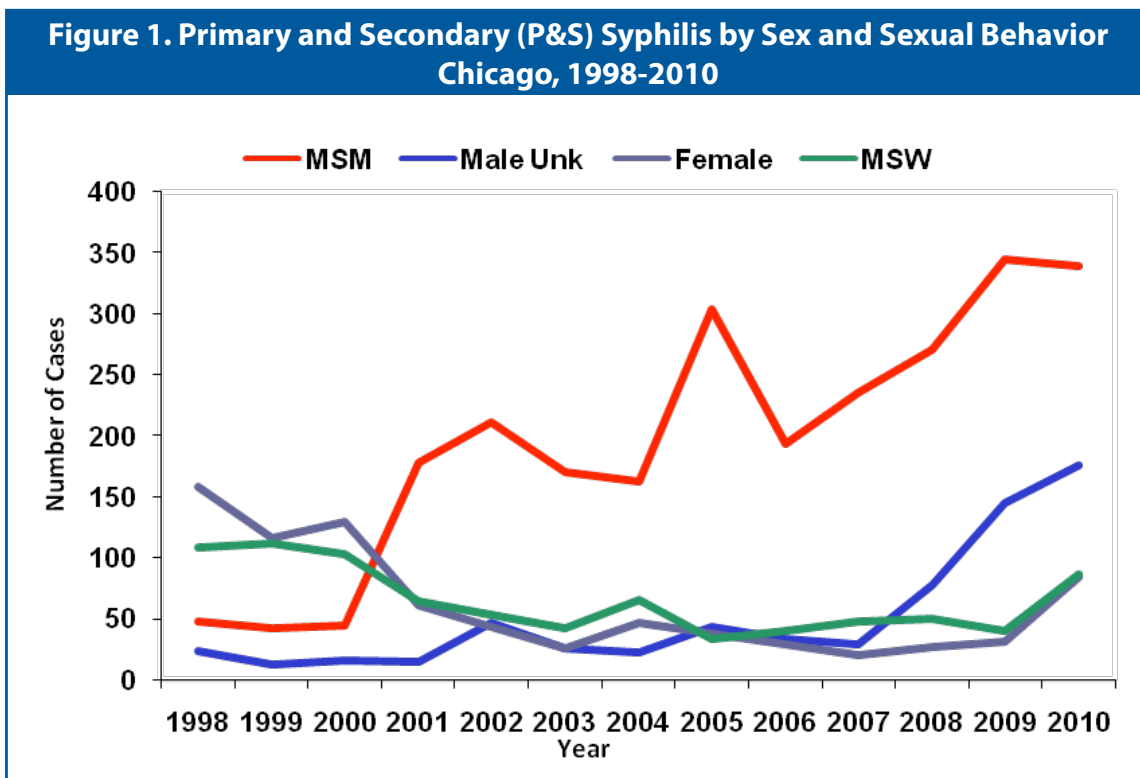
Report Highlights

- Between 2009 and 2010, primary and secondary (P&S) syphilis cases increased by 23% (22% among non-Hispanic Whites, 59% among non-Hispanic Blacks and 13% in Hispanics).
- In 2010, 88% of P&S syphilis cases were in men. Of those, 50% were among men who have sex with men (MSM) reflecting the ongoing epidemic of syphilis in this population.
- Between 2009 and 2010 the number of P&S syphilis cases in MSM slightly decreased (by 1.5%). However, 26% of the cases were reported as male with unknown gender of sex partner, which, if known, could impact the magnitude of the MSM epidemic.
- Between 2009 and 2010, the number of P&S syphilis cases among females and heterosexual males increased by 171% and 115%, respectively. In 2009, 31 cases were reported for females and 40 for heterosexual males. In 2010, 84 and 86 cases were reported, respectively.
- In 2010, the highest proportion of P&S syphilis cases occurred in non-Hispanic Blacks (59%) and in those ages 20-29 (38%).
- HIV and syphilis infections are prevalent among the same risk groups and have been reported to enhance the acquisition and transmission of one another. In 2010, 57% of MSM who were diagnosed with P&S syphilis infection were co-infected with HIV.
- Please see pages 7-8 of this report to see what CDPH is doing in response to this epidemic and what you can do personally.

Epidemiological Profile

During the 1990's, virtually all cases of primary and secondary (P&S) syphilis in Chicago were among heterosexuals, with men accounting for approximately 50% of all cases. The epidemiology of P&S syphilis changed dramatically in the late 90's. Between 2000 and 2001, the incidence of P&S syphilis infection in the United States rose by 2%, with rates increasing by 15.4% in men, and decreasing 17.6% in women. The increases among men were largely attributable to an explosion of new cases among men having sex with men (MSM), a trend also observed in major cities

throughout the country, including Atlanta, San Francisco, Los Angeles, New York City, Seattle, and Miami. P&S syphilis in MSM first emerged in 1998, when 48 cases were reported to the Chicago Department of Public Health (CDPH), and comprised 14% of Chicago's P&S syphilis morbidity. In 2010, 50% of the total P&S syphilis cases in the city were among MSM, 12% were among women and 12% were among men who have sex with women (MSW). The increase in cases among MSM continues through 2010.



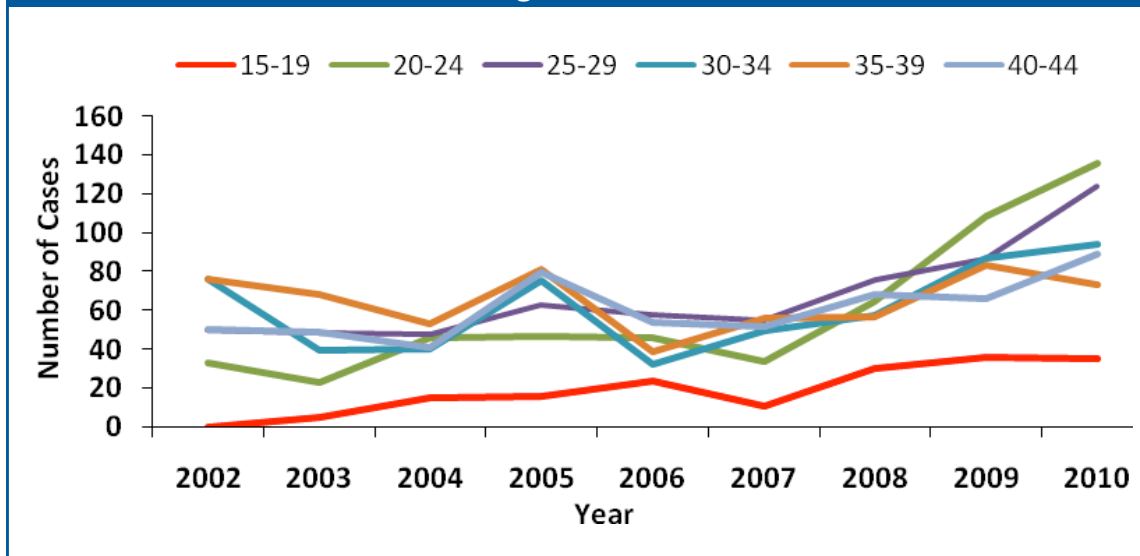
The rate of P&S syphilis increased 31% (from 19.3 to 25.4 cases per 100,000 population) from 2009 to 2010. During this period, the number of P&S syphilis cases increased 23%, from 561 to 686. Males represent 88% of cases in 2010 and females 12%. The male-to-female syphilis rate ratio has risen gradually since

1998, reflecting higher rates in men than women. This increase is consistent with an increase in P&S syphilis cases among MSMs (Figure 1). In 2010, the male to female rate ratio was 7:1.

The age distribution of people diagnosed with P&S syphilis has changed between 2009 and 2010 (Figure 2). The increase in cases occurred primarily among those 20-24, 25-29 and over 40 years of age. In 2010,

most of the cases were diagnosed among people 20-29 (38%) years of age, followed by those 30-39(24%) and 40-49(23%).

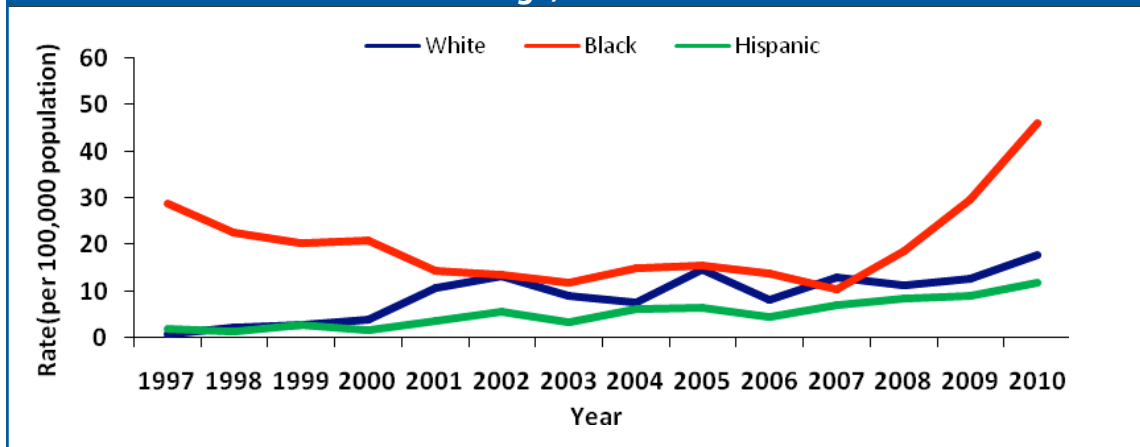
Figure 2. Number of Primary and Secondary (P&S) Syphilis by Age Groups, Chicago, 1997-2010



Shifts in P&S syphilis morbidity were observed across racial and ethnic categories between 2009 and 2010 (Figure 3). In 2010, 22% of P&S syphilis cases were among whites, 59% among African-Americans and

13% among Latinos. Asian/Pacific Islanders accounted for 1.6% of P&S syphilis cases and 4% of cases had an unspecified designation for race/ethnicity.

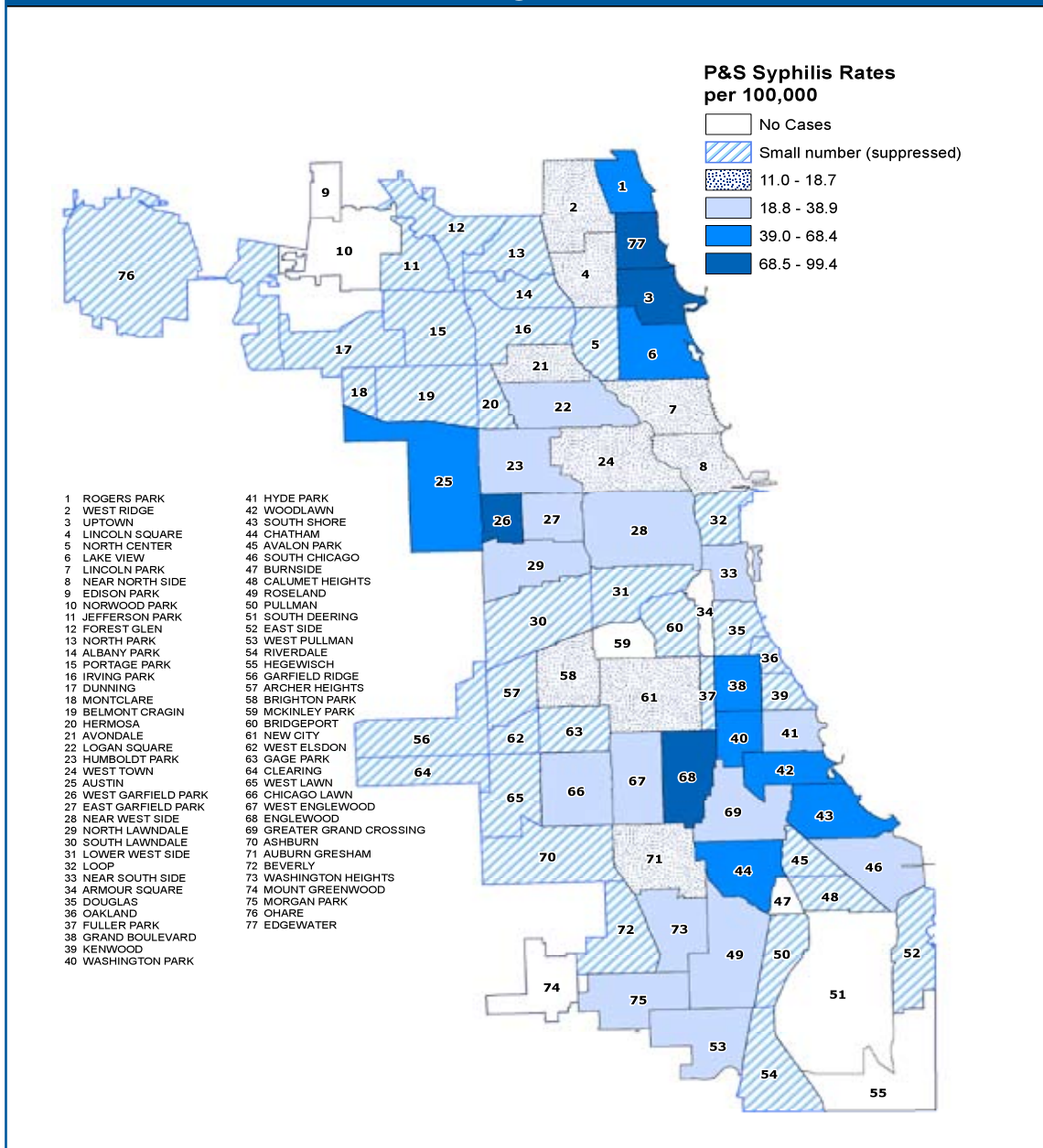
Figure 3. Rates of Primary and Secondary (P&S) Syphilis by Race/Ethnicity, Chicago, 1997-2010



While cases of infectious syphilis continued to occur in the city's South and West Sides, the current outbreak of infectious syphilis is significantly concentrated in MSM who live in several neighborhoods in the

North Side (Figure 4). However, there is potential for African-American MSM, who lives on the South Side to travel to the North Side, socially.

Figure 4. Primary and Secondary Syphilis Incidence Rates by Community Area, Chicago, 2010

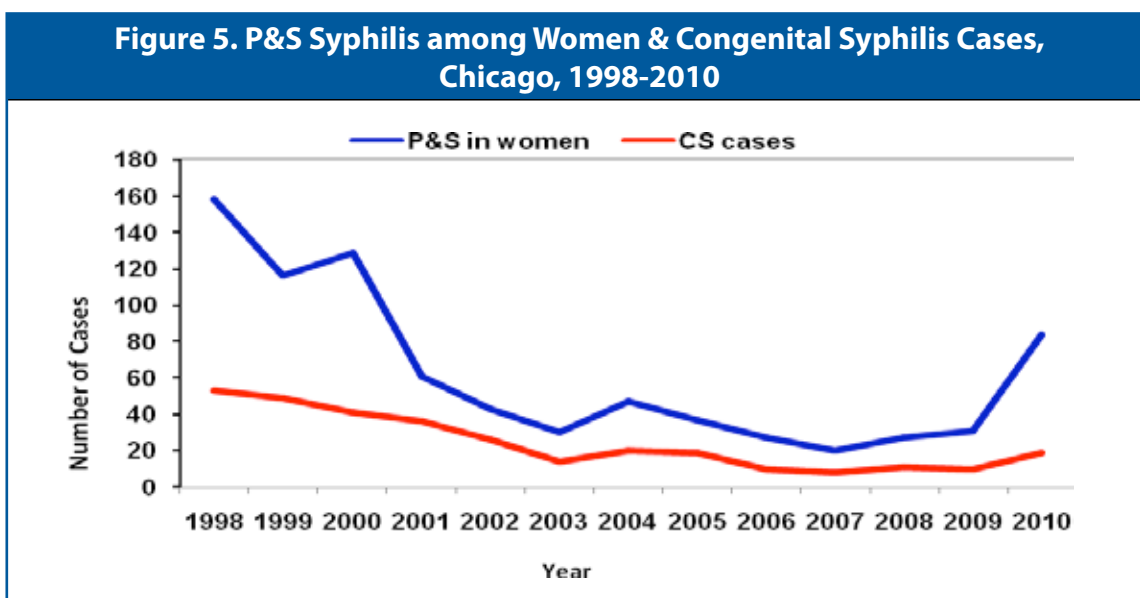


Congenital Syphilis

Congenital Syphilis (CS) is a devastating but preventable outcome of syphilis infection during pregnancy. Screening and treatment of syphilis infections in women, especially pregnant women, are required to prevent any increase in CS infections.

After declining for 12 years, the number of CS cases among infants < 1 year increased by 90% in Chicago (from 10 cases reported in 2009 to 19 cases reported

in 2010) (Figure 5). The median age of the mothers was 24 years (range 17-44 years). Almost all (90%) of mothers who gave birth to infants with congenital syphilis in 2010 were African-Americans. Lack or limited prenatal care was an identified to be a contributing risk factor for delivering infants with congenital syphilis cases in 2010. Despite the recent increase in congenital syphilis cases in 2010, the overall trend of congenital syphilis in Chicago has declined over the last decade as shown in the graph below.



What is CDPH Doing About Syphilis?

To address this concerning increase in syphilis cases in Chicago, CDPH is coordinating a multicomponent response. In collaboration with key stakeholders, CDPH reinvigorated the Syphilis Elimination Task Force which will leverage community resources to promote disease prevention messaging and interventions. In addition, CDPH engaged the Illinois and Cook County Departments of Public Health to assure sharing of disease activity data and coordination of interventions to control disease. Specific strategies that will be implemented include public education, healthcare provider engagement/education and heightened disease monitoring activity.

The following is a summary of the key elements included in these efforts:

Public Education/Engagement

- CDPH is launching public awareness campaign including billboards, radio, bus, internet and television advertising in English and Spanish. Key messages will focus on the importance of getting tested and treated, and the importance of notifying and treating sexual partners.
- CDPH will continue to offer a dedicated web site; GetTestedChicago.com that provides information on syphilis including where people can get tested and treated.
- CDPH will conduct educational forums in high risk communities to disseminate disease and prevention messages.

- CDPH will conduct focus groups among high risk populations to gain a better understanding of the knowledge, attitudes and beliefs about syphilis, to improve prevention messages and strategies.

Healthcare provider education/engagement

- CDPH will work with healthcare providers to increase their awareness of syphilis in Chicago, recommendations for screening, diagnosis, treatment, case reporting and the need for partner notification services for their infected clients.

Partner Services

- CDPH follows up with individuals infected with syphilis to ensure that sex partners are referred for examination and treatment to reduce the spread of disease in the community.
- New approaches to partner services are being implemented including using the internet to notify individuals of exposure to syphilis.
- CDPH provides ongoing training to its staff who conducts partner services to ensure highest quality of service.

What You Can Do About Syphilis?

- If you think you have syphilis or any other sexually transmitted infection see your doctor immediately.
- If your sex partner tells you that he/she has syphilis get checked right away even if you do not have any symptoms.
- If you are contacted by a public health worker please cooperate with the testing and the partner notification process to avoid re-infection and reduce the spread of the infection in your community.
- Consider joining the Syphilis Elimination Task Force to share your ideas how to better prevent and control syphilis in your community.
- Share this information with others.
- The mission of the Chicago Department of Public Health, Division of STI/HIV is to work in partnership with the community to use the best public health practices to prevent and treat HIV and sexually transmitted Infections (STI's) and to promote the health and well-being of those living with and affected by STIs, HIV and AIDS.


For more information about syphilis and where you can get tested, please visit - www.gettestedchicago.org or call to learn more about all sexually transmitted diseases including HIV and syphilis 1-800-AID-AIDS (243-2437).



To find more information about Healthy Chicago, HIV and STI programs
contact the Chicago Department of Public Health: www.cityofchicago.org/health

You can also connect with CDPH at:

 Twitter: @ChiPublicHealth

 Facebook: <http://www.facebook.com/ChicagoPublicHealth>



Chicago Department of Public Health

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