# **Sexually Transmitted Infections** in the City of Baltimore: 2005



### **GOALS**

- 1. Elimination of syphilis by 2010:
  - Fewer than 4 cases per 100,000 residents.
  - Zero cases of congenital syphilis.
- 2. Reduction in gonorrhea rate to fewer than 300 cases per 100,000 residents by 2010.
- 3. Reduction in chlamydia prevalence to achieve: lower than 3% positive rate in females attending family planning clinics by 2010.

## THE IMPACT OF GONORRHEA, CHLAMYDIA AND SYPHILIS

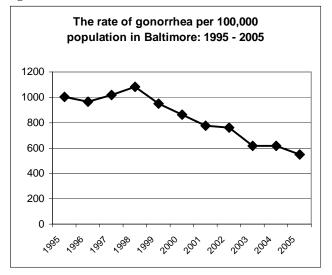
Although chlamydia and gonorrhea are easily treated with antibiotics, both diseases have serious health consequences if untreated. The consequences are most severe in women. Gonorrhea and chlamydia cause Pelvic Inflammatory Disease (PID), which may lead to chronic pelvic pain, infertility and ectopic pregnancy. In men, gonorrhea and chlamydia can cause epididymitis and infertility. In addition, both chlamydia and gonorrhea increase the likelihood of HIV/AIDS transmission. <sup>1</sup>

Untreated syphilis can cause paralysis, blindness, dementia and even death. In addition, syphilis may be transmitted from mother to child during pregnancy with potentially lethal implications for the infant.

#### MAJOR GONORRHEA DECREASE IN BALTIMORE

Rates of gonorrhea have declined dramatically in Baltimore over the past decade, from 1,002.4 reported cases per 100,000 population in 1995 to 547.5 reported cases per 100,000 population in 2005 – a decrease of 45%. The rate declined 11% from 616.9 per 100,000 population in 2004.<sup>2</sup> Although Baltimore's rate of gonorrhea remains above the national rate, its rate of decrease is greater than the national average. Between 2000 and 2004 (the most recent year with national data), the rate of gonorrhea decreased 27% in Baltimore, as compared to a 12% decrease nationwide.<sup>3</sup>

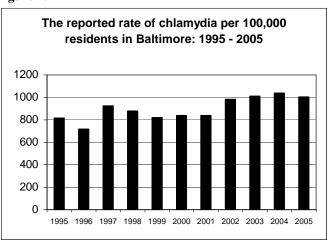
Figure 1.



### CHLAMYDIA DECLINES AMONG PATIENTS TESTED IN CITY- FUNDED PROGRAMS IN BALTIMORE

Total reports of chlamydia have increased during the last decade in Baltimore (See Figure 2). The increase in Baltimore is matched by a nationwide increase in reports of chlamydia. As noted by the Center for Disease Control, "The increase in reported chlamydia infections during the last 10 years reflects the expansion of chlamydia screening activities, use of increasingly sensitive diagnostic tests, an increased emphasis on case reporting from providers and laboratories, and improvements in the information systems for reporting."

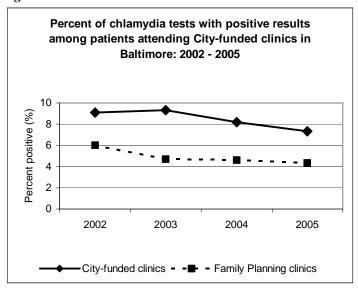
Figure 2.



Examining available chlamydia data in the extensive network of Baltimore City non-profit and public clinics indicates that the rate of chlamydia in high-risk populations is decreasing.

In Baltimore programs receiving support from the Health Department, the rate of positive chlamydia test results has moved from 9.1% in 2002 to 9.3% in 2003 to 8.2% in 2004 and 7.3% in 2005.<sup>5</sup> This is a cumulative decline of 20%. In the Health Department family planning clinics, the percent of tests with positive results declined from 6.0% in 2002 to 4.7% in 2003 to 4.6% in 2004 and 4.3% in 2005, as shown in Figure 3.

Figure 3.

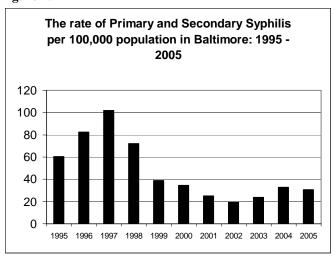


### SYPHILIS DECLINES IN 2005

Nationwide, syphilis reached a peak in 1990, decreased throughout that decade, and then began to increase again in the 21<sup>st</sup> century. In Baltimore, syphilis rates climbed from 60.3 per 100,000 in 1995 to 101.8 per 100,000 in 1997. Rates then dropped to a low of 19.3 per 100,000 population in 2002. After a small increase to 32.9 in 2004, the syphilis rate dropped to 30.8 per 100,000 in 2005. (See Figure 4.)<sup>6</sup>

Like syphilis in adults, congenital syphilis reached its highest point in 1997 with 56 cases in Baltimore. Starting in 1998, congenital syphilis declined, reaching a nadir of two cases in 2001. The level of congenital syphilis has risen modestly, with 12 cases of congenital syphilis in 2005. Baltimore City counts cases of congenital syphilis on the basis of laboratory results without respect to clinical findings of the disease.

Figure 4.



### **OUTREACH IN BALTIMORE**

To accelerate the elimination of syphilis, the Baltimore City Health Department has built one of the largest mobile field-testing programs in the nation. By performing syphilis tests in the streets and alleys of Baltimore, the Health Department is able to reach some of the highest risk individuals in the city. This approach to syphilis screening in the community has yielded high rates of testing and treatment among those with behavioral risks for syphilis. The Health Department plans a renewed effort to eliminate congenital syphilis.

#### **ACKNOWLEDGEMENTS**

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### **Notes**

- <sup>1</sup> D.T. Fleming and J.N. Wasserheit, "From epidemiological synergy to public health policy and practice: the contribution of other sexually transmitted diseases to sexual transmission of HIV infection." *Sexually Transmitted Infections*, 1999, 75: 3-17.
- <sup>2</sup> Rates may differ slightly due to use of different population estimates.
- <sup>3</sup> Centers for Disease Control, *Trends in Reportable Sexually Transmitted Diseases in the United States*, 2004 *National Surveillance Data for Chlamydia, Gonorrhea, and Syphilis*, Tables 5 and 12. Accessed on May 15, 2006. (Available online at: http://www.cdc.gov/std/stats/tablesgon.htm)
- <sup>4</sup> Centers for Disease Control, *Trends in Reportable Sexually Transmitted Diseases in the United States, 2004 National Surveillance Data for Chlamydia, Gonorrhea, and Syphilis, Accessed on May 15, 2006.* (Available online at: http://www.cdc.gov/std/stats/chlamydia.htm )
- <sup>5</sup> Aggregated data not available prior to 2002. Data is presented from clinics receiving funding from the Infertility Prevention Program.