

## Section 6. Sexually Transmitted Diseases

This section provides an overview of the incidence and trends of sexually transmitted diseases – chlamydia, gonorrhea, and primary and secondary syphilis – in the District of Columbia. Sexually transmitted diseases (STDs) continue to have a major impact on the health of District residents, particularly adolescents and MSM.

### Summary

From 2007 to 2011, the District received 31,590 reports of chlamydia infection, an 11% increase in the number of reported cases between 2006 and 2010 (28,461 cases). Among the reported cases approximately two-thirds were women (65.4%), two-thirds were black (64.0%), and more than two-thirds (69.6%) were between 15 and 24 years of age. Geographically, the greatest number of chlamydia cases were reported among persons living in Wards 7 and 8 (39.1%). [Refer to appendix table 8](#) for more information on chlamydia infections reported between 2007 and 2011 in the District.

From 2007 to 2011, the District received 12,216 reports of gonorrhea infection, a 6% increase in the number of reported cases between 2006 and 2010 (11,569 cases). Unlike chlamydia, the sex of reported cases was divided almost equally between men and women at 51.9% and 47.9%, respectively. Almost three-quarters of reported cases were among blacks (70.6%) and more than half (61.0%) were between 15 and 24 years of age. The greatest number of gonorrhea cases were also reported among persons living in Wards 7 and 8 (41.6%). [Refer to appendix table 9](#) for more information on gonorrhea infections reported between 2007 and 2011 in the District.

From 2007 to 2011, the District received 782 reports of primary and secondary syphilis infection, also known as infectious syphilis, a 6% increase in the number of reported cases between 2006 and 2010 (735 cases). Unlike chlamydia and gonorrhea, which predominately affected youth and young adults less than 25 years of age, almost two-thirds (63.6%) of primary and secondary syphilis cases were 30 years of age or older. Slightly more than half (58.4%) of reported primary and secondary syphilis cases were among blacks and almost all cases (96.2%) were reported among men. In contrast to chlamydia and gonorrhea, the greatest number of primary and secondary syphilis cases were reported among persons living in Wards 1 and 2 (38.7%). [Refer to appendix table 10](#) for more information on primary and secondary syphilis infections reported between 2007 and 2011 in the District.

### Reported Cases of Chlamydia and Gonorrhea in the District of Columbia

Chlamydia is the most commonly reported STD in the United States, sexually active women 25 years old and younger need to be tested every year, and even though it is easy to cure, these bacteria can impact a woman's ability to have children if left untreated.

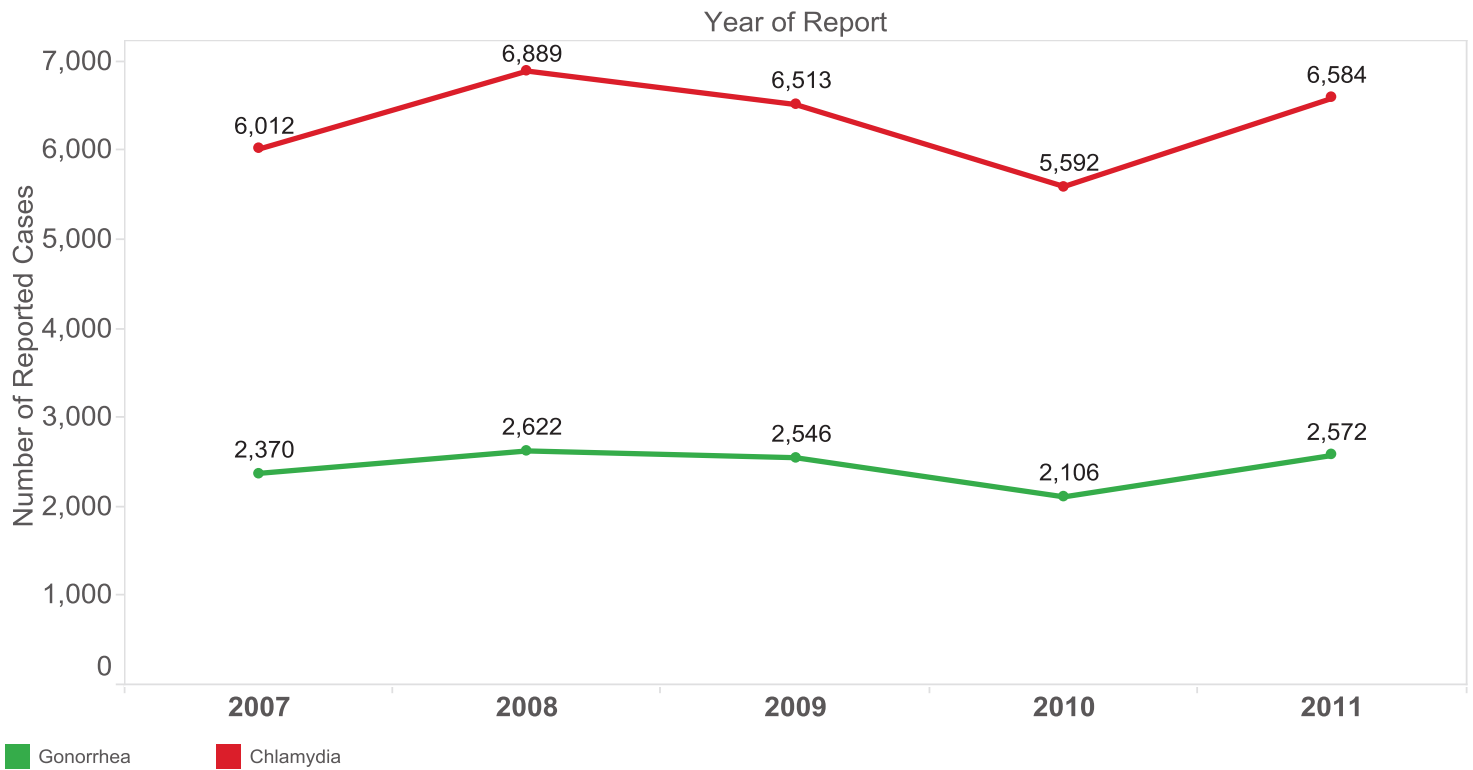
Because of emerging antibiotic resistance, this infection requires treatment with two different antibiotics (dual therapy). Gonorrhea infection can occur in anyone who is sexually active. If they occur, symptoms in men and women vary depending on what part of the body is infected: these bacteria can infect the anus, eyes, mouth, genitals, or throat. This disease can impact the ability to have children if left untreated.

### Figure 23

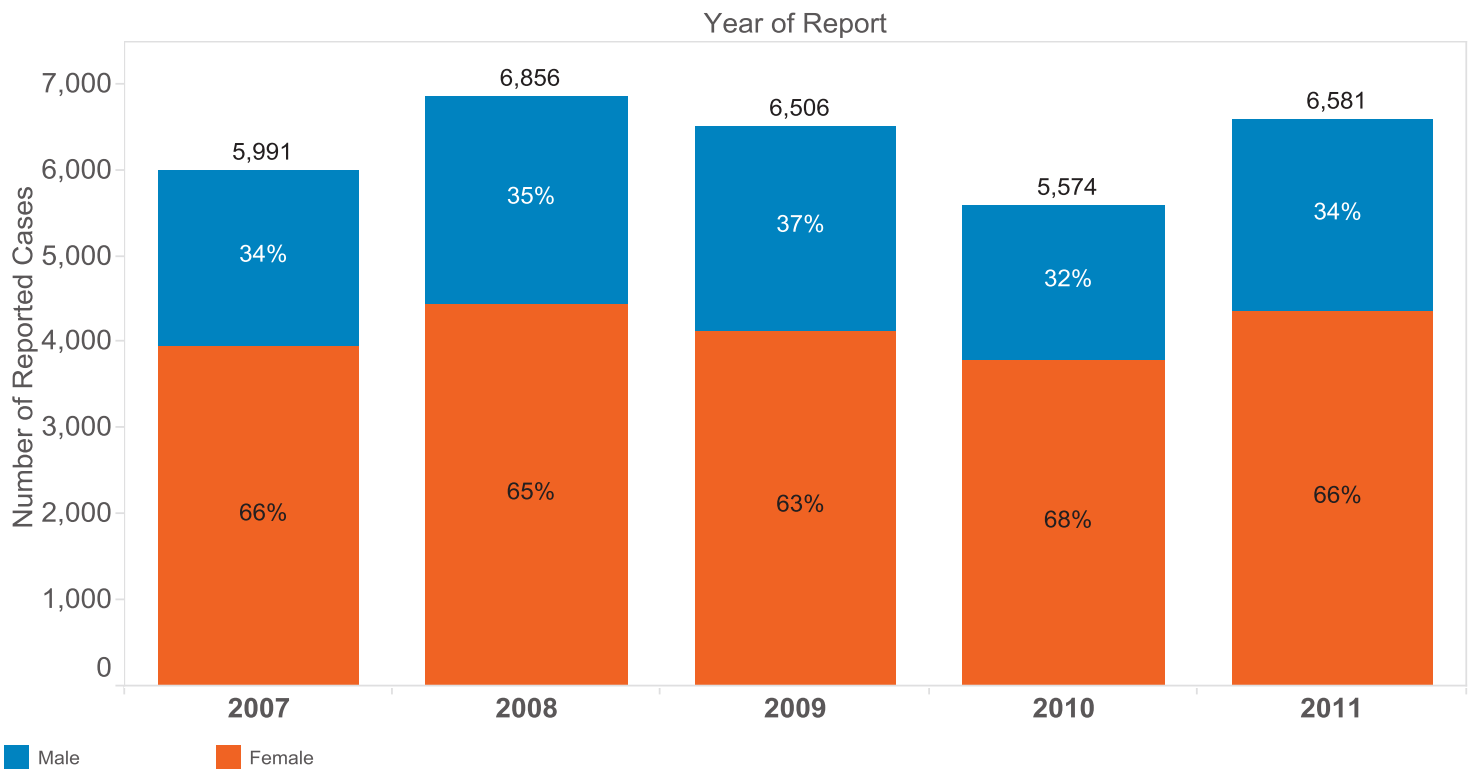
- Chlamydia is often considered the "silent disease," meaning infections may not have any symptoms and are usually detected during screening. That is, the "more you look for it" (i.e. screen for it) the "more you will find it." Screening is when all people receive a test regardless of symptoms.
- In contrast, gonorrhea is usually symptomatic and identified through diagnostic testing rather than screening.
- Due to more sensitive testing technology, an increase in youth-focused screening programs, and an increase in the non-genital (throat and rectum) screening of men who have sex with men, the number of reported chlamydia and gonorrhea cases gradually increased between 2007 and 2011.

**Figure 23. Reported Chlamydia and Gonorrhea Cases by Year of Report**

District of Columbia, 2007-2011

**Figure 24. Reported Chlamydia Cases by Year of Report and Sex**

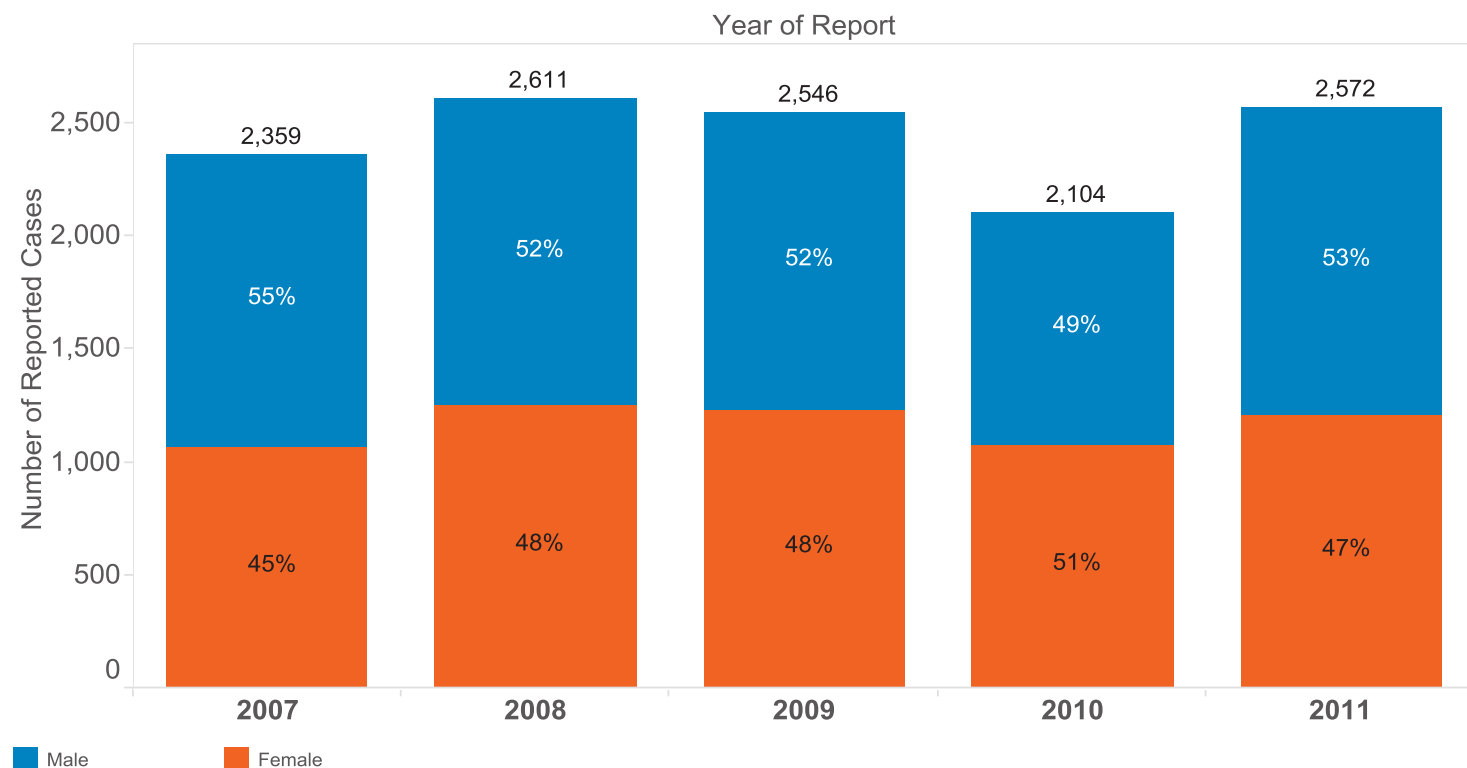
District of Columbia, 2007-2011



\*Missing sex not included

**Figure 25. Reported Gonorrhea Cases by Year of Report and Sex**

District of Columbia, 2007-2011

**Figures 24 & 25**

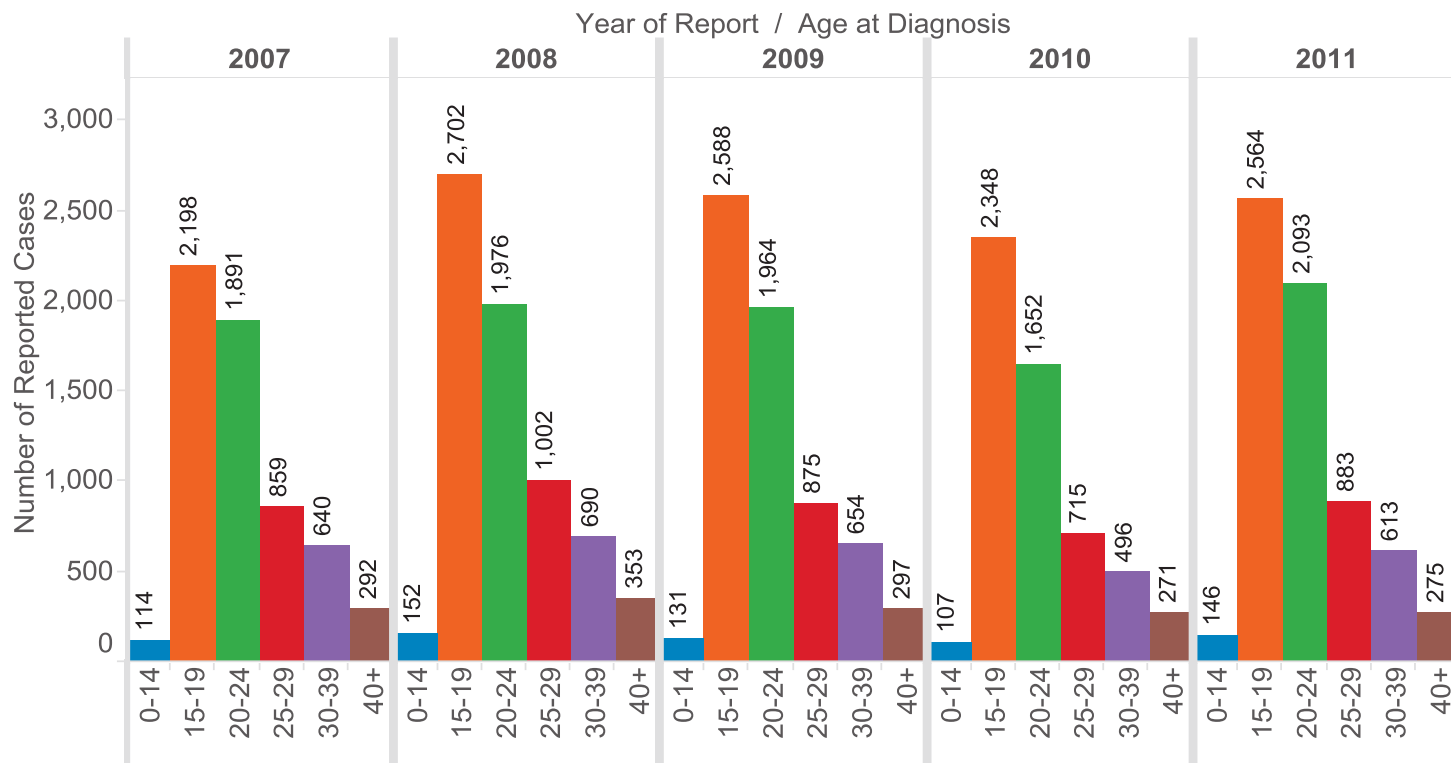
- Undetected and untreated chlamydial infection may lead to infertility and pelvic inflammatory disease. CDC guidelines and most chlamydia screening programs target women of childbearing age. This explains the percentage of chlamydia cases reported among women was higher than among men, ranging from a low of 63% (2009) to a high of 68% (2010).
- In contrast, most gonorrhea cases are identified through diagnostic testing. The percentage of cases reported among men and women is almost equal regardless of report year.

**Figure 26 & 27**

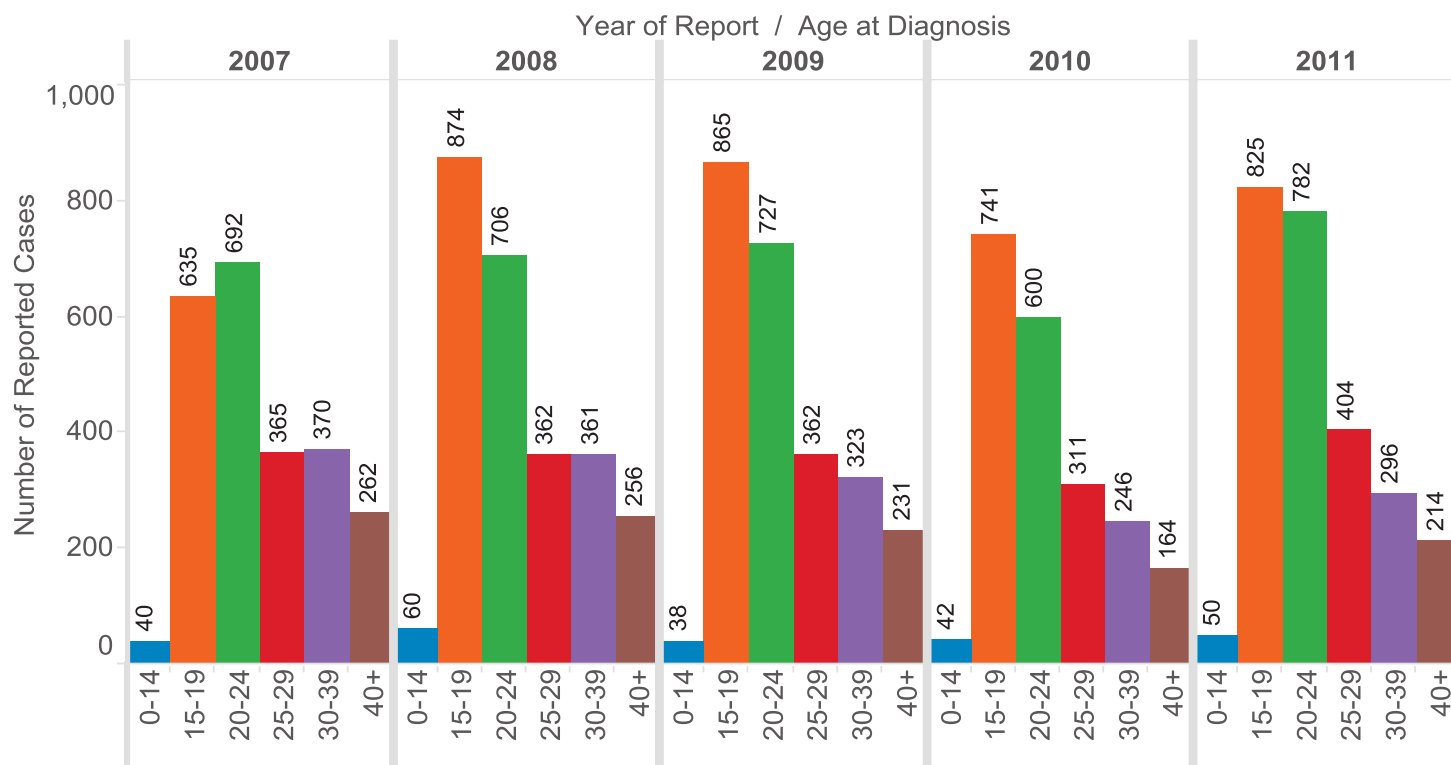
- In 2007, 36.6% of reported chlamydia cases were among 15 to 19 year olds. In 2011, 38.9% were reported among this same age category.
- In 2007, 26.8% of reported gonorrhea cases were among 15 to 19 year olds. In 2011, 32.1% were reported among this same age category.
- Both of these increases are most likely due to targeted screening of adolescents and differ somewhat from national surveillance data, where the highest rates of both infections are reported among 20 to 24 year olds.

**Figure 26. Reported Chlamydia Cases by Year of Report and Age at Diagnosis**

District of Columbia, 2007-2011

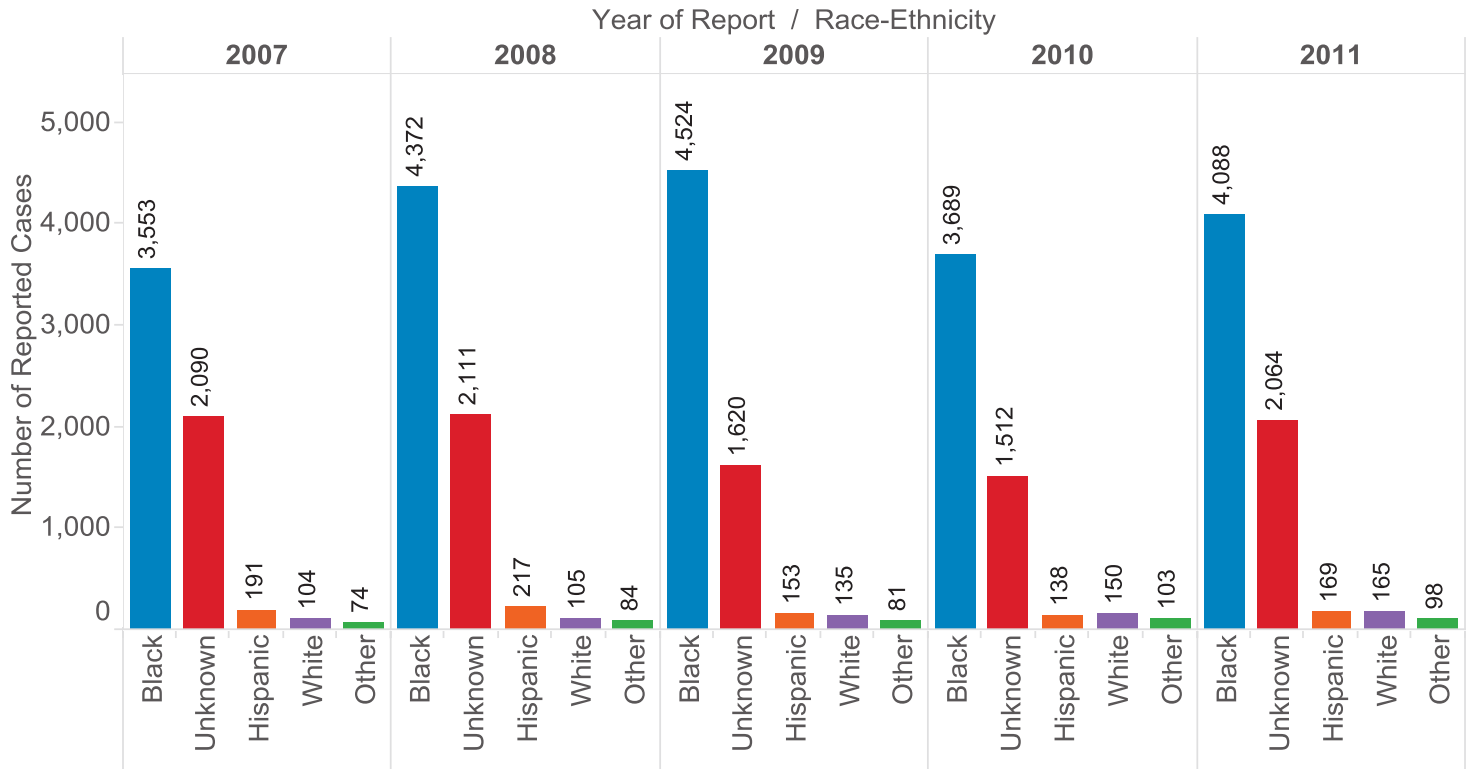
**Figure 27. Reported Gonorrhea Cases by Year of Report and Age at Diagnosis**

District of Columbia, 2007-2011

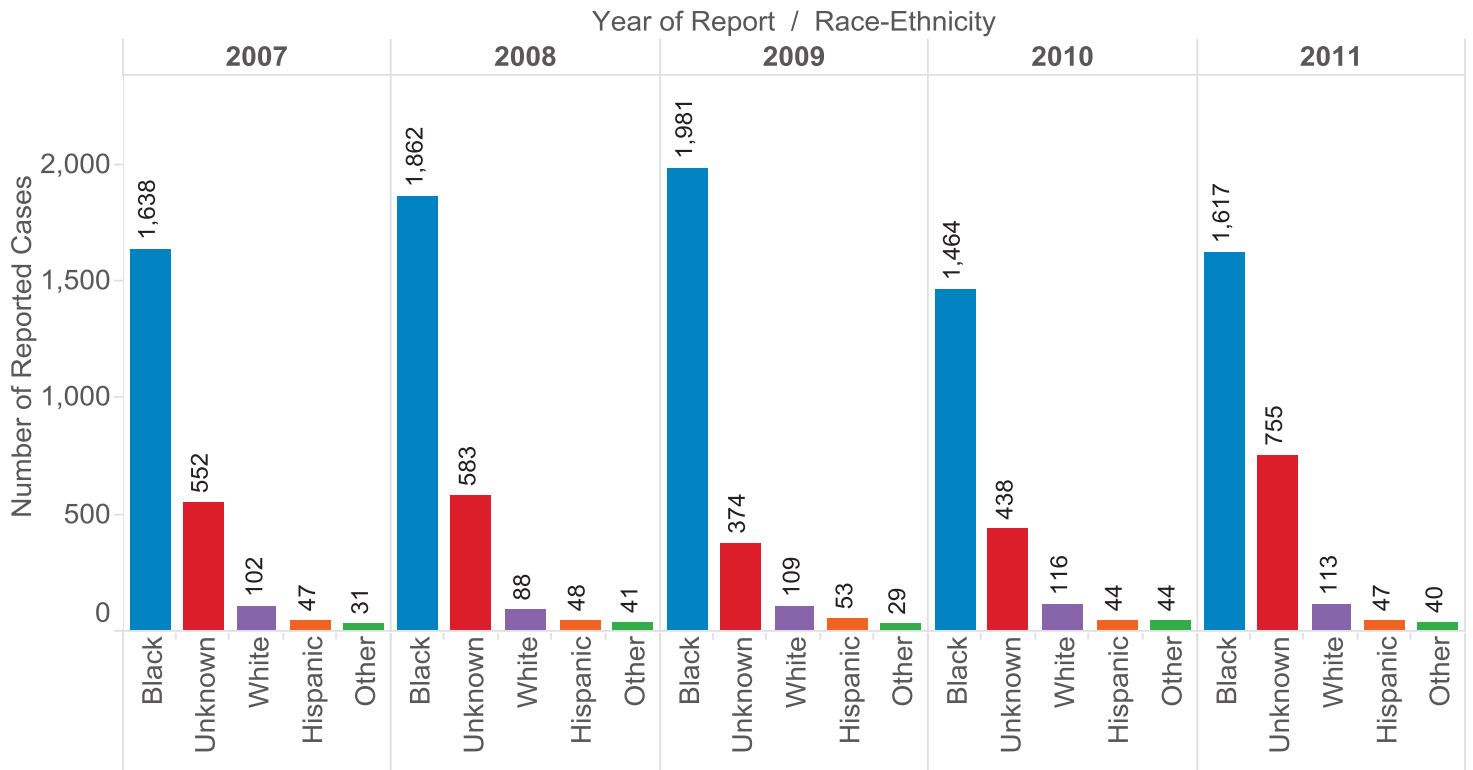


**Figure 28. Reported Chlamydia Cases by Year of Report and Race**

District of Columbia, 2007-2011

**Figure 29. Reported Gonorrhea Cases by Year of Report and Race**

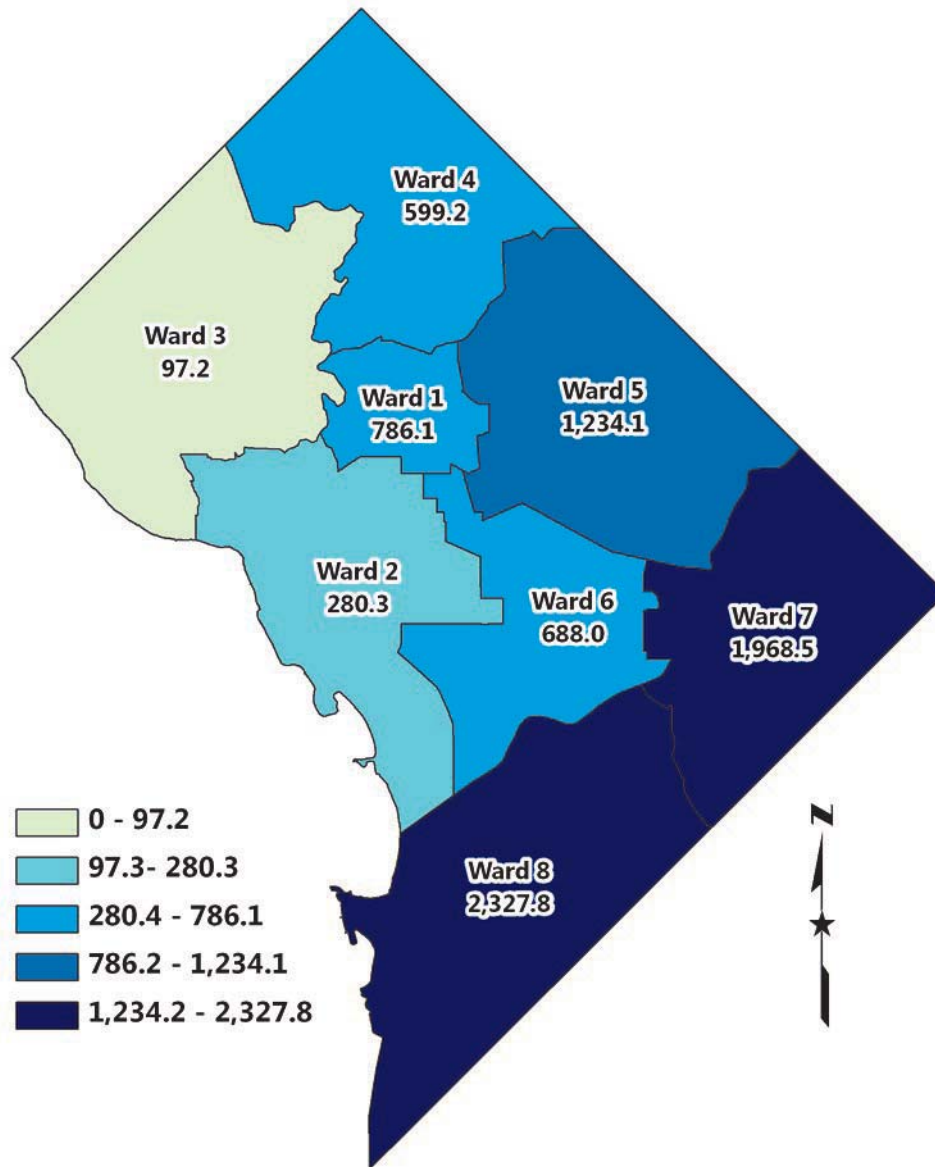
District of Columbia, 2007-2011



**Figures 28 & 29**

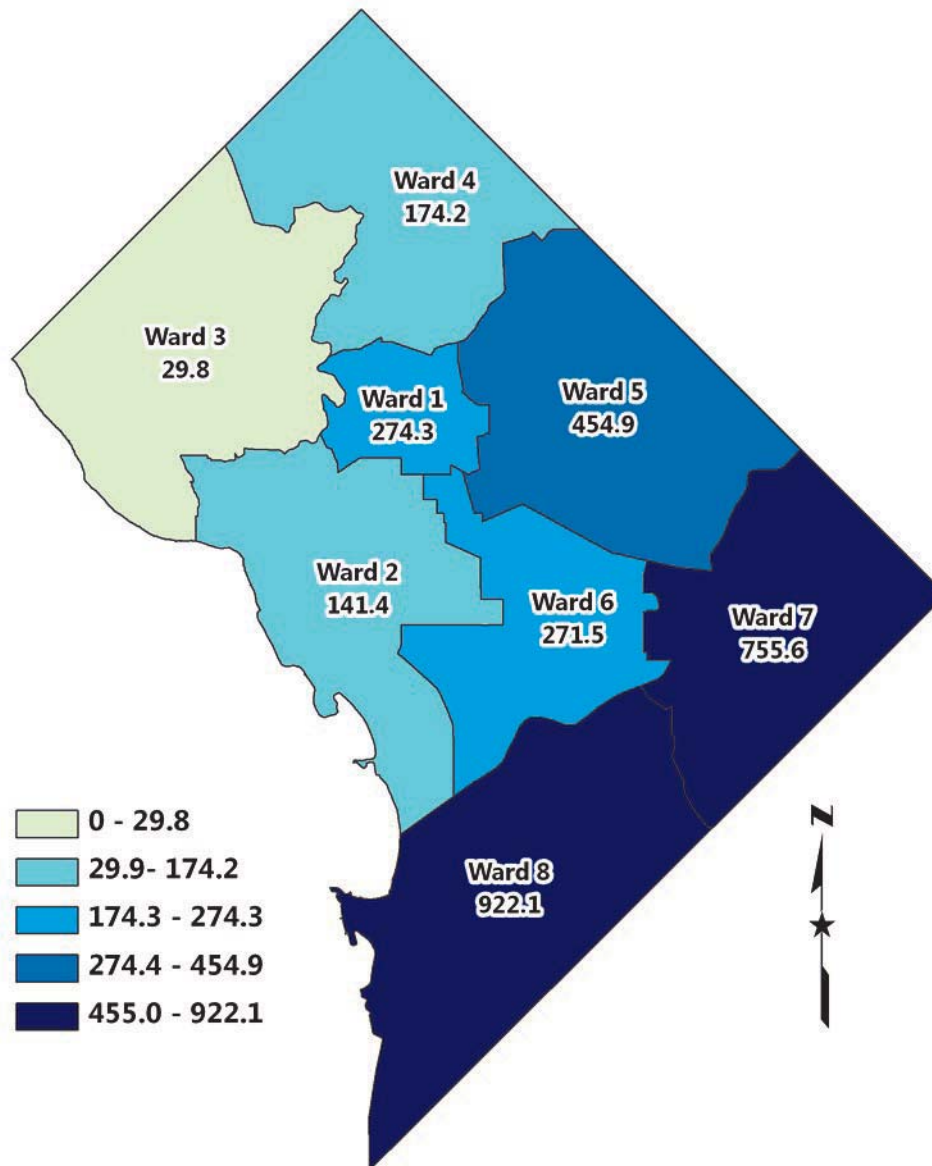
- Among chlamydia cases with known race/ethnicity, the proportion of black cases remained consistent at 90.6% in 2007 and 90.4% in 2011.
- Among gonorrhea cases with known race/ethnicity, the proportion of black cases also remained consistent with 90.1% in 2007 and 89.0% in 2011.
- Blacks represent about half of the District population (49.2%), but make up the majority of reported chlamydia and gonorrhea cases with known race/ethnicity in the District. This disparity among chlamydia and gonorrhea cases is consistent with national surveillance data.

**Map 3. Chlamydia Rates per 100,000 persons by Ward**  
District of Columbia, 2011



- Ward information was available for 88.7% of chlamydia cases diagnosed in 2011.
- In 2011, the highest rate for chlamydia cases was reported in Ward 8 (2,327.8 cases per 100,000 persons).
- In 2011, the lowest for chlamydia cases was reported in Ward 3 (97.2 cases per 100,000 persons).
- Refer to Table A9 in the Appendix for absolute numbers by ward.

**Map 4. Gonorrhea Rate per 100,000 persons by Ward**  
District of Columbia, 2011



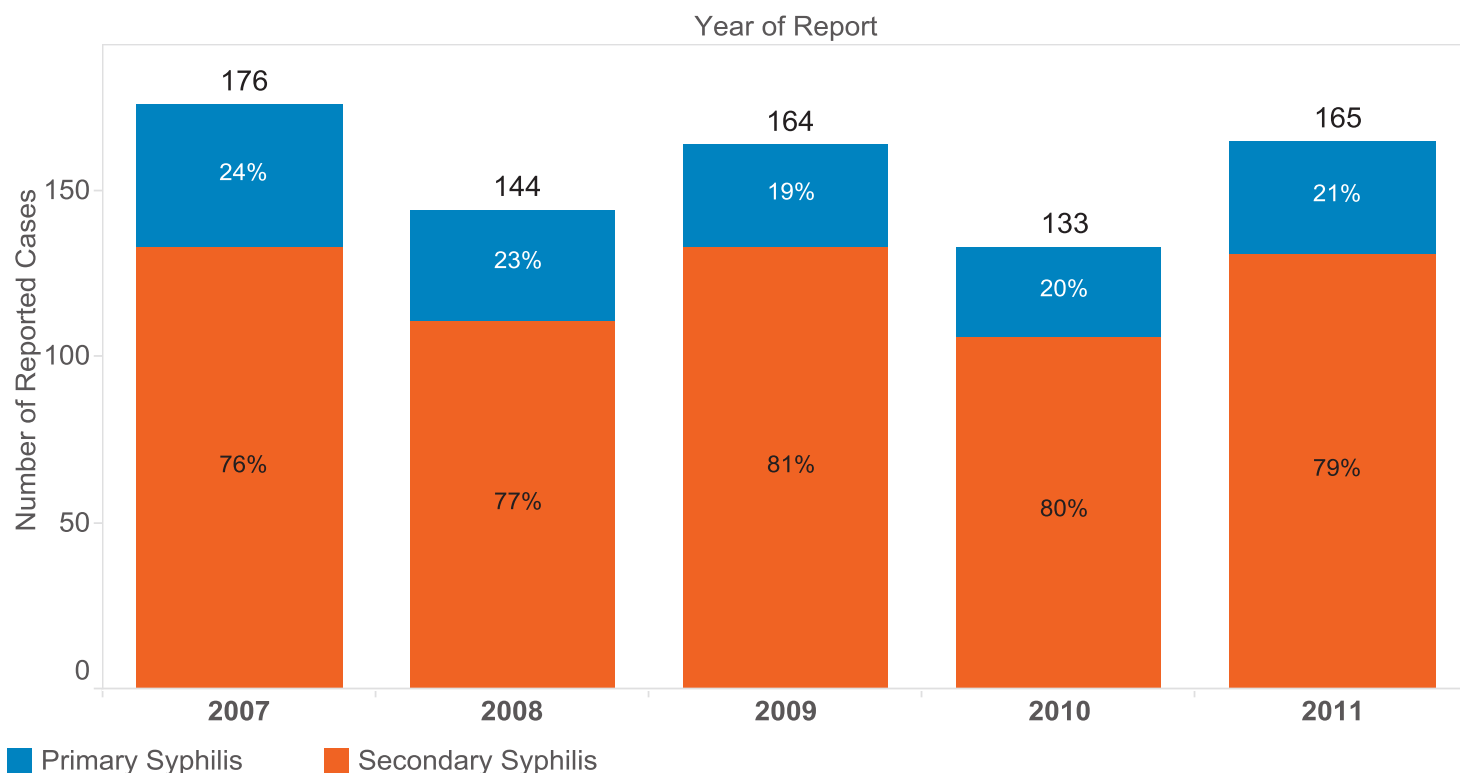
- Ward information was available for 86.0% of the gonorrhea cases diagnosed in 2011.
- In 2011, the highest rate of gonorrhea cases was reported in Ward 8 (922.1 cases per 100,000 persons).
- In 2011, the lowest rate of gonorrhea cases was reported in Ward 3 (29.8 cases per 100,000 persons).
- Refer to Table A10 in the Appendix for absolute numbers of cases by ward.

### Reported Cases of Primary and Secondary Syphilis in the District of Columbia

Primary syphilis is defined as the stage of syphilis characterized by a large painless lesion (chancre) where the bacteria entered the body. This lesion can be on or in the mouth, rectum, vagina, or penis. The time from exposure/infection to the onset of symptoms ranges from 10 to 90 days, with an average of 21 days. The chancre tends to be painless and thus often goes unnoticed, which results in people not seeking medical care. Secondary syphilis is characterized by rashes that can appear anywhere on the body, but typically involve the hands and feet, which prompts people to seek care. Other secondary syphilis symptoms can include fever, swollen lymph glands, sore throat, patchy hair loss, headaches, weight loss, muscle aches and fatigue. Primary and secondary syphilis surveillance data is used as a measure of the incidence (new cases) of syphilis.

**Figure 30.** Reported Cases of Primary and Secondary Syphilis Cases by Year of Report

District of Columbia, 2007-2011

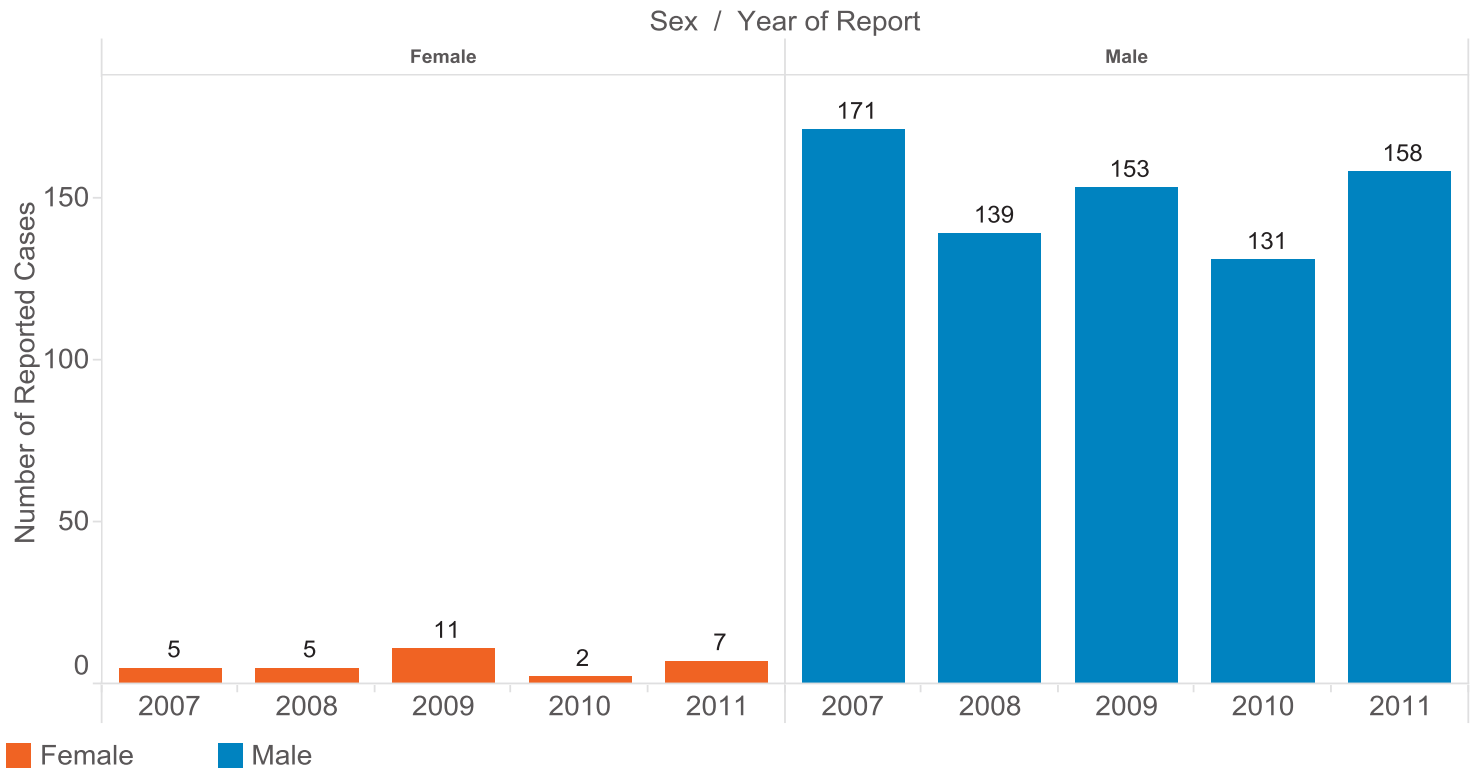


**Figure 30**

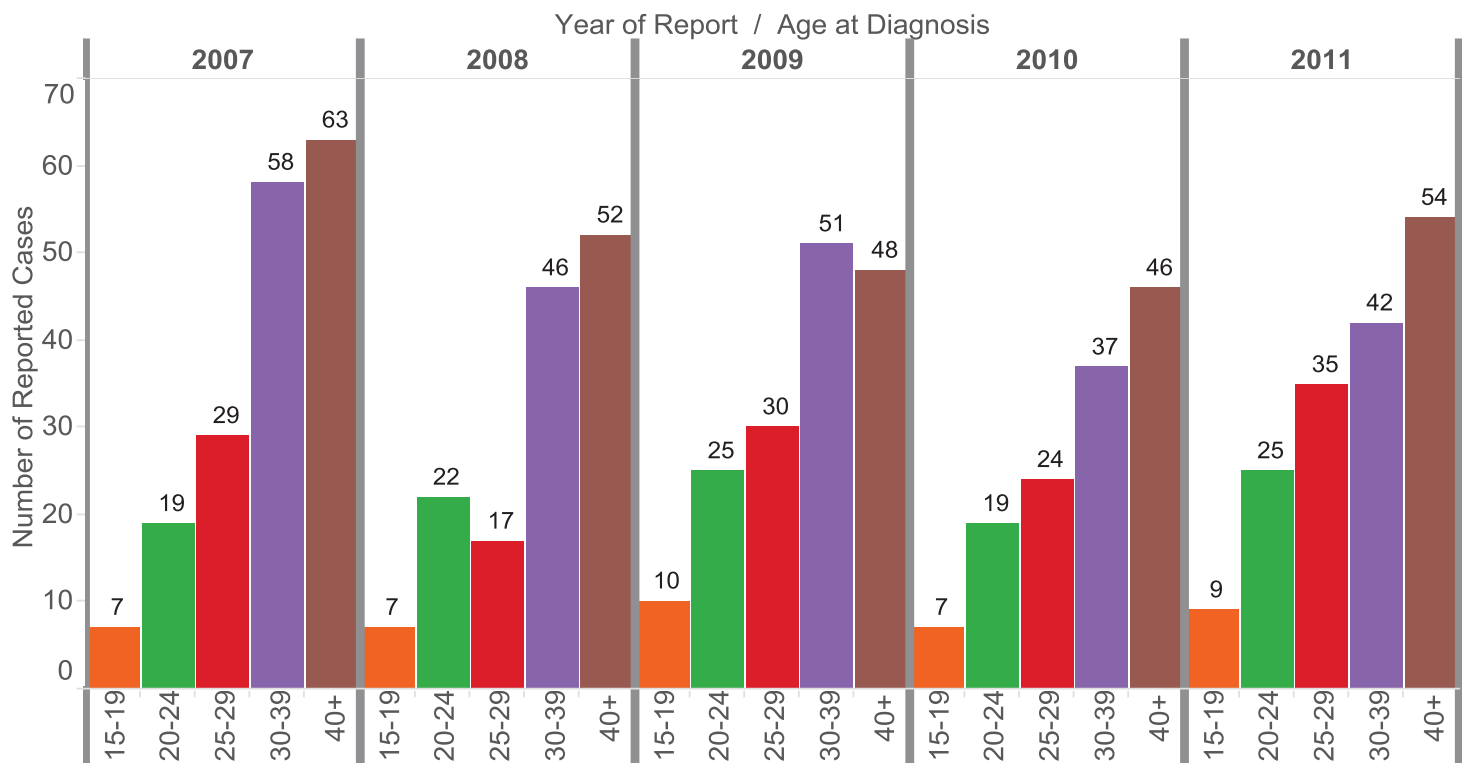
- Since 2000, there has been a reemergence of syphilis in the District of Columbia. In 2000, there were less than 40 cases of infectious syphilis reported, while in 2011 there were 165 cases reported. This trend is consistent with national surveillance data.
- Between 2007 and 2011, secondary syphilis represented 76% to 81% of infectious syphilis cases reported each year.



**Figure 31.** Reported Cases of Primary and Secondary Syphilis Cases by Year of Report and Sex  
District of Columbia, 2007-2011

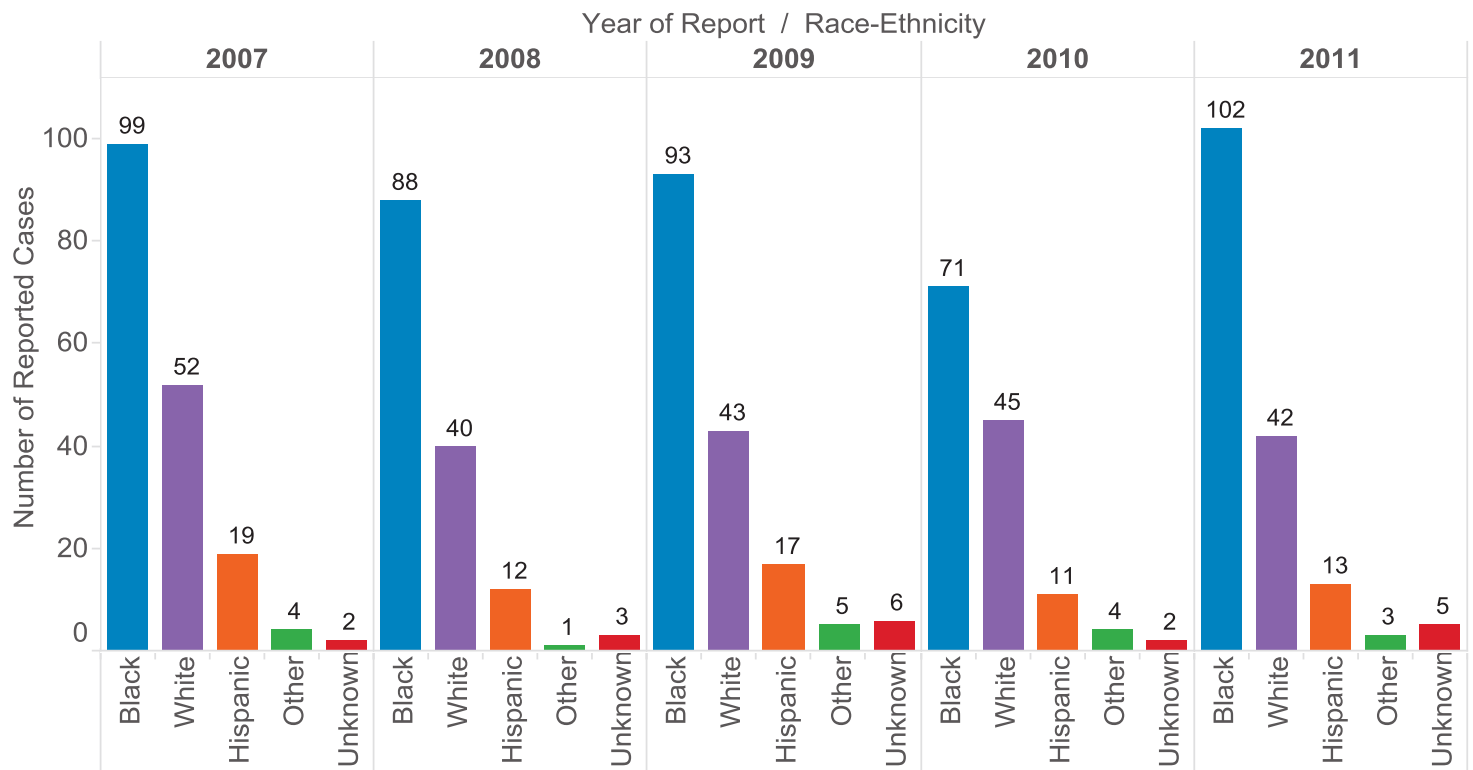


**Figure 32.** Reported Cases of Primary and Secondary Syphilis Cases by Year of Report and Age  
District of Columbia, 2007-2011



**Figure 33. Reported Cases of Primary and Secondary Syphilis Cases by Year of Report and Race**

District of Columbia, 2007-2011

**Figure 31**

- In 2000, the ratio of men to women reported with infectious syphilis was approximately 2.8 to 1. In 2011 the men to women ratio of infectious syphilis was 22 to 1. This indicates that the primary mode of transmission driving the re-emergence of primary and secondary syphilis in Washington, DC is men who have sex with men (MSM). This trend is consistent with national surveillance data.

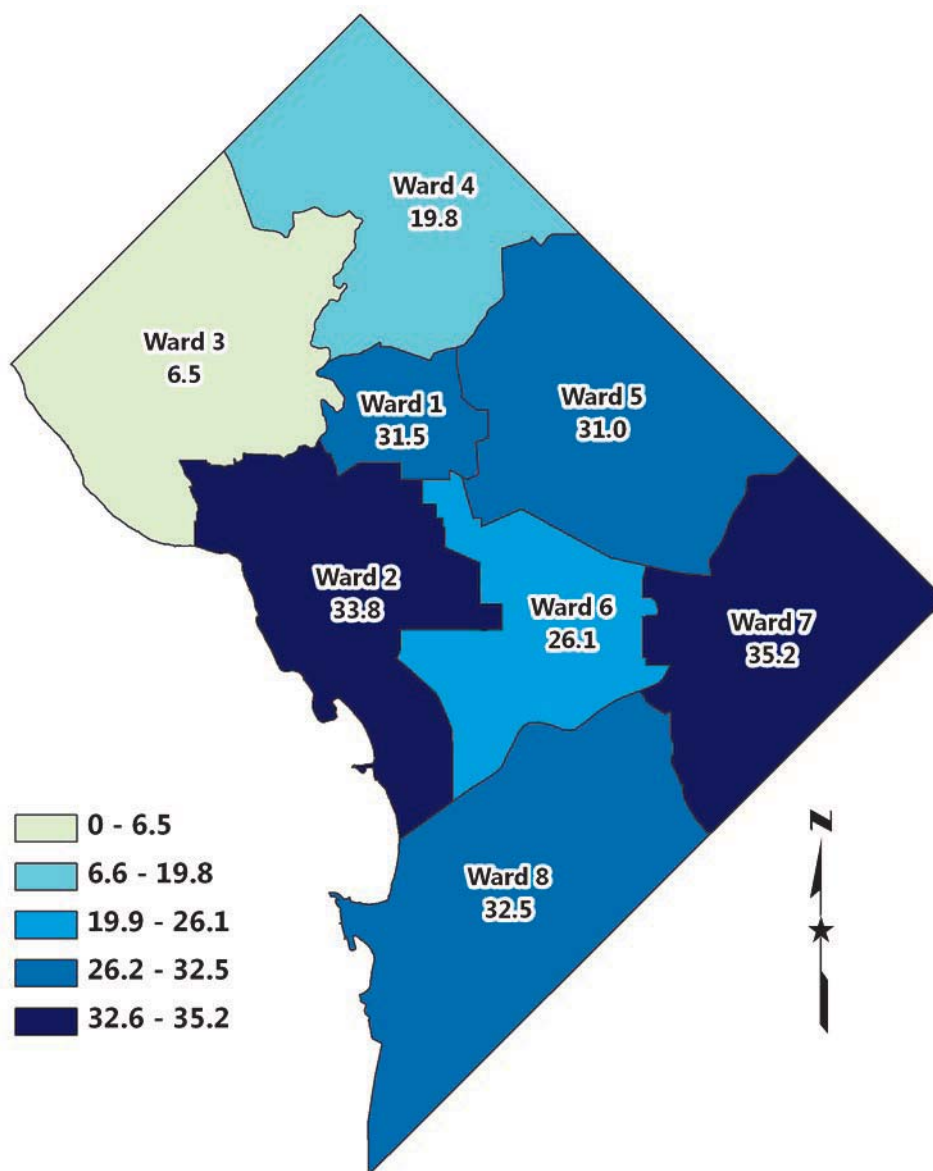
**Figure 32**

- Regardless of report year, and unlike chlamydia and gonorrhea (in which the majority of cases were diagnosed among people 15 to 24 years of age), the largest number of primary and secondary syphilis cases was reported among those 30 years of age and older.
- In 2007, 27.3% of infectious syphilis cases were reported among 20 to 29 year olds, while in 2011, this percentage was 36.4%.

**Figure 33**

- From 2007 to 2011, 28.6% of reported infectious syphilis cases were among whites. This is substantially higher than for chlamydia (2.1%) and gonorrhea (4.4%) cases, which is consistent with national surveillance data.

**Map 5.** Primary and Secondary Syphilis Rates per 100,000 persons by Ward  
District of Columbia, 2011



- Ward information was available for 98.2% of syphilis cases diagnosed in 2011.
- In 2011, the highest rates of primary and secondary syphilis were in Ward 7 (35.2 cases per 100,000 persons) and Ward 2 (33.8 cases per 100,000 persons).
- In 2011, the lowest rate of primary and secondary syphilis was in Ward 3 (6.5 cases per 100,000 persons).
- Refer to Table A11 in the Appendix for absolute numbers of cases by ward.