

Gonorrhea

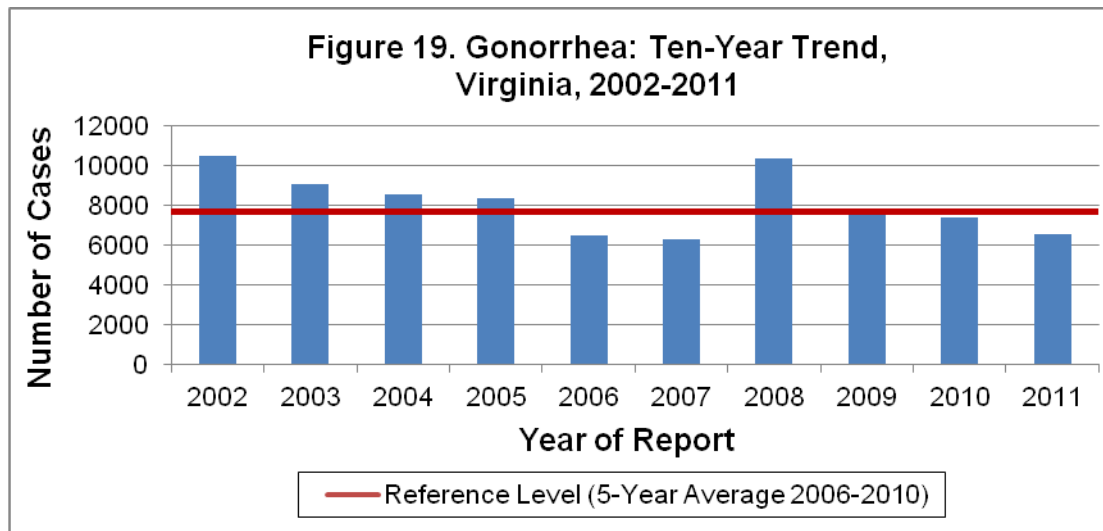
Agent: *Neisseria gonorrhoeae* (bacteria)

Mode of Transmission: Sexually transmitted through direct contact with infected areas.

Signs/Symptoms: Infected men can have a burning sensation while urinating and a discharge from the urethra. Infected women are usually asymptomatic, although vaginal discharge or bleeding after intercourse may occur. Untreated gonorrhea among women can lead to pelvic inflammatory disorder and infertility.

Prevention: Preventive measures include safe sexual practices and ensuring that infected sexual contacts are treated.

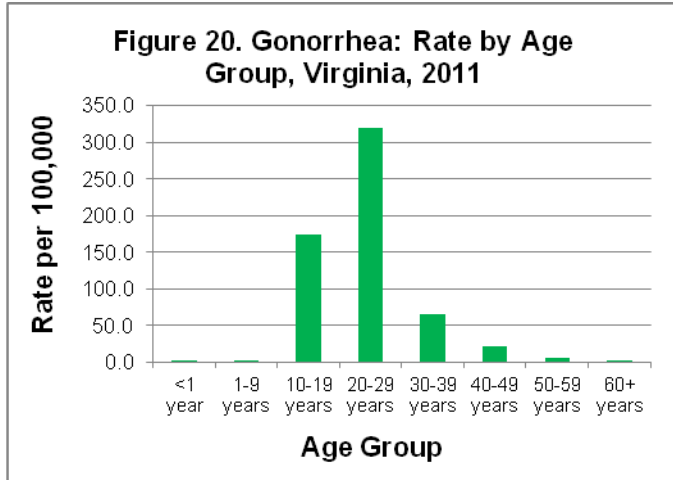
Other Important Information: The emergence of antibiotic resistance led CDC, in 2007, to discontinue recommending any fluoroquinolone regimens for the treatment of gonorrhea. Furthermore, as of August 2012, oral cephalosporins are no longer a recommended treatment due to declining cefixime susceptibility among *N. gonorrhoeae* isolates collected in the United States during 2006-2011. CDC no longer recommends cefixime at any dose as a first-line regimen for treatment of gonococcal infections. From 2006 to 2011, the percentage of gonorrhea isolates from a national sentinel monitoring system with reduced susceptibility to cefixime (i.e. elevated cefixime minimum inhibitory concentrations or MICs) increased from 0.1% in 2006 to 1.5% in 2011. The largest increases were observed among men who have sex with men (MSM), from 0.2% in 2006 to 3.8% in 2011. CDC now recommends combination therapy for gonorrhea with ceftriaxone administered intramuscularly and either azithromycin or doxycycline given orally for 7 days.



According to CDC, gonorrhea is substantially underdiagnosed and underreported, and approximately twice as many new infections are estimated to occur as are reported each year. In Virginia, the 6,521 cases of gonorrhea reported in 2011 represent a 12% decrease from the 7,401 cases seen in 2010, and a 15% decrease from the 5-year average of 7,653.8 cases per year (Figure 19). The notably low counts seen in 2006 and 2007, followed by an elevated number of cases in 2008, were at least partly attributed to changes in data handling and data entry protocols. Because of the substantial under-

diagnosis of this condition, it is not clear whether the declines beginning in 2009 indicate decreases in disease or less complete diagnosis and testing. Although fewer cases have recently been reported in Virginia, nationally the number of cases reported in 2010 and 2011 were on the rise.

A comparison of age groups indicates that the incidence of gonorrhea is highest in the 20-29 year age group (318.6 per 100,000 population), followed by the 10-19 year age group (173.7 per 100,000 population) (Figure 20). These two age groups have experienced the highest gonorrhea incidence since 1989. Gonorrhea remains the sexually transmitted disease with the most significant racial disparity in Virginia. The rate in the black population (282.4 per 100,000) was 22 times the rate in the white population (12.6 per 100,000), and almost 18 times the rate in the “other” race population (16.1 per 100,000). Gonorrhea incidence rates were higher among females than males (90.6 and 71.7 per 100,000, respectively).



Since 2008, the eastern region has had the highest proportion of reported cases, as well as the highest incidence. For 2011, 2,521 cases were reported from the eastern region, resulting in an incidence rate of 164.9 per 100,000. This was followed by the central region with a rate of 124.6 per 100,000. Among the other regions in the state, incidence ranged from 25.6 to 60.7 per 100,000.