

CHLAMYDIA INFECTION: Notes About the Disease

Chlamydia infection is caused by *Chlamydia trachomatis*, obligate intracellular bacteria with a Gram-negative-like cell wall. Chlamydia generally infects the columnar epithelial cells and often becomes chronic, lasting months to more than a year if untreated. This infection is the most prevalent sexually transmitted disease in the nation and in North Carolina.

The incubation period for *C. trachomatis* infection is unknown, but it is estimated to be 5-10 days in symptomatic infection. *C. trachomatis* causes urogenital infections and conjunctivitis in males and females. Approximately three quarters of infected females and half of infected males have no symptoms at all. Though most *C. trachomatis* infections in women and in men are asymptomatic, clinical manifestations can occur at any site of infection. The most common site for chlamydial infection in men is the urethra, where it presents as painful dysuria and a urethral discharge which is either mucoid and cloudy or clear. Pregnant women infected with chlamydia can pass the infection to their infants during delivery, potentially resulting in neonatal ophthalmia and pneumonia.

In women, asymptomatic untreated chlamydial infections may result in pelvic inflammatory disease (PID), which is a major cause of infertility, ectopic pregnancy, and chronic pelvic pain. CDC and the North Carolina Communicable Disease Branch currently recommend that all sexually active females age 24 years and under, as well as all pregnant women, be screened for asymptomatic chlamydia. There are no comparable screening programs for young men.

Diagnosis of chlamydia is made via nucleic acid amplification test of urine, urethral or cervical specimen.

Chlamydia is predominantly found in younger age groups. For males, the highest rates are consistently found in the 20 to 24 age group, followed by 15 to 19. For females the trend is usually reversed, with 15 to 19 year olds having the highest rates, followed by 20 to 24 year olds.

Measures to control transmission include referral of all sex partners within sixty days of diagnosis or onset of symptoms or most recent sex partner if exposure is greater than sixty days. Sex partners must be examined, tested and empirically treated at time of service. Use of latex condoms with sexual encounters is also effective in controlling transmission of this infection.