

What are Chlamydia and Gonorrhea?

Chlamydia and gonorrhea are common sexually transmitted diseases (STDs) that are spread through sexual contact with the penis, vagina, mouth, or anus of an infected individual. Chlamydia and gonorrhea can also be transmitted from a mother with an untreated cervical infection to her newborn during childbirth (1).

Chlamydia is caused by infection with the obligate intracellular bacterium *Chlamydia trachomatis*, while gonorrhea is caused by infection with the bacterium *Neisseria gonorrhoeae*.

Symptoms of Chlamydia and Gonorrhea

Many individuals with chlamydia or gonorrhea do not show any symptoms. For chlamydia, only an estimated 10% of infected males show symptoms and 5-30% of infected females (2). For gonorrhea, an estimated 85-90% of infected males show symptoms, but only ~20% of infected females (3).

The symptoms of chlamydia and gonorrhea can be very similar. Females may experience abnormal vaginal discharge, endocervical bleeding, increased urinary frequency, and dysuria. Males can suffer from dysuria, frequent urination, abnormal urethral discharges, and testicular pain and swelling (2,4).

Chlamydia and gonorrheal infections of the rectum may lead to rectal pain, discharge, itching, and bleeding (3). Sexually acquired chlamydial conjunctivitis can also occur in both males and females (5). Pharyngeal gonorrheal infections are generally asymptomatic but may cause a sore throat (6).

Complications of Chlamydia and Gonorrhea

Untreated chlamydial and gonorrheal infections in females can lead to pelvic inflammatory disease (PID), and PID-associated infertility, ectopic pregnancy, and chronic pelvic pain. Untreated chlamydia during pregnancy has been associated with preterm delivery (2), and untreated gonorrhea during pregnancy increases the risk of miscarriage and inflammation of the lining of the uterus (7).

Chlamydial and gonorrheal infections can be passed to newborns during delivery, increasing the risk of chlamydial conjunctivitis and pneumonia (8), and gonorrhea-associated eye infections and sepsis (7).

Complications in untreated males can include epididymitis, infertility, and prostatis (1). Other potential complications include gonococcal bacteremia, pharyngitis, and reactive arthritis. Chlamydial and gonorrheal infections also facilitate the transmission of HIV infection (1).

Chlamydia & Gonorrhea Information Sheet

Who is at risk of chlamydia and gonorrhea?

Any sexually active individual is at risk of chlamydial or gonorrheal infection, with an increased risk among younger individuals. Chlamydia and gonorrhoea are the most prevalent STDs in the United States. Annual chlamydia cases are estimated to be around 2.86 million (9), while 583,405 gonorrheal cases were reported to the CDC in 2018 (10).

How are chlamydia and gonorrhoea diagnosed?

Modern nucleic acid amplification testing (NAAT) provides the most sensitivity and specificity for chlamydia and gonorrhea diagnoses. These can be performed on vaginal swabs (either clinician- or patient-collected) or urine.

How are chlamydia and gonorrhoea treated?

Chlamydia and gonorrhea are easily cured with antibiotics. However, repeat chlamydial and gonorrheal infections from sexual contact with an infected partner are common, increasing the risk of serious reproductive health complications. Antibiotics do not repair any permanent damage done by the disease.

How do I reduce my risk?

Abstaining from vaginal, anal, or oral sex is the only way to completely avoid sexually transmitted diseases, such as chlamydia and gonorrhea. Other ways to reduce the risk include being in a long-term mutually monogamous relationship with a partner who has tested negative for STDs, and using latex condoms correctly.

Where can I find more info?

Visit www.genetrackdiagnostics.com for full test information, including specimen collection requirements

CONTACT US:

Email: support@genetrackdiagnostics.com Phone: 1-888-802-0703

NOTE:

This brochure is provided for general information purposes only. It is not intended to replace medical advice from a health professional.

References:

- Sexually Transmitted Disease Surveillance, 2018. CDC. [Online] October 2019. .
- 2. Asymptomatic sexually transmitted diseases: the case for screening. Farley, T A, Cohen, D A and Elkins, W. 4, April 2003, Prev Med, Vol. 36, pp. 502-509.
- 3. Gonorrhea Gonococcal Infection (clap, drip). New York State Department of Health. [Online] November 2006.
- Chlamydia trachomatis Proctitis. Quinn, T C, et al. 1981, N Engl J Med, Vol. 305, pp. 195-200.
- Ocular chlamydial infections: pathogenesis and emerging treatment strategies. Kalayoglu, M V. 1, March 2002, Curr Drug Targets Infect Disord, Vol. 2, pp. 85-91.
- 6. Gonorrhea Detailed Fact Sheet. CDC. [Online] November 2019.
- 7. Gonorrhea. American Sexual Health Association. [Online]
- Longitudinal studies of chlamydial infection in the first year of life.
 Hammerschlag, M R, et al. 6, 1982, Pediatr Infect Dis, Vol. 1, pp. 395-401.
- Sexually transmitted infections among US women and men: prevalence and incidence estimates. Satterwhite, C L, et al. 3, 2013, Sexually Transmitted Diseases, Vol. 40, pp. 187-193.
- Sexually transmitted Disease Surveillance 2018, Gonorrhea. CDC.
 [Online] October 2019.