

# What are Chlamydia, Gonorrhea & Trichomoniasis?

Chlamydia, gonorrhea and trichomoniasis are common sexually transmitted diseases (STDs) that are spread through sexual contact with the penis, vagina, mouth, or anus of an infected individual (1).

Chlamydia is caused by infection with the obligate intracellular bacterium *Chlamydia trachomatis*, gonorrhea is caused by infection with the bacterium *Neisseria gonorrhoeae*, and trichomoniasis is caused by infection with the protozoan parasite *Trichomonas vaginalis*.

## **Symptoms**

Many individuals with chlamydia, gonorrhea or trichomoniasis 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). For trichomoniasis, approximately 30% of infected individuals show symptoms (4).

The symptoms of these three STDs 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 (1).

Chlamydia and gonorrhea infections of the rectum may lead to rectal pain, discharge, itching, and bleeding (5, 6). Sexually acquired chlamydial conjunctivitis can also occur in both males and females (7). Pharyngeal gonorrheal infections are generally asymptomatic but may cause a sore throat (8).

## Complications

Untreated chlamydia and gonorrhea 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 (9), and untreated gonorrhea during pregnancy increases the risk of miscarriage and inflammation of the lining of the uterus (10). Trichomoniasis during pregnancy also increases the risk of premature rupture of membranes, preterm delivery, and low birth weight, and is associated with an increased risk of the transmission of HIV from an HIV-positive mother to her child (11).

Chlamydia and gonorrhea can be passed to newborns during delivery, increasing the risk of chlamydial conjunctivitis and pneumonia (7), and gonorrhea-associated eye infections and sepsis (5).

Complications in untreated males can include epididymitis, infertility, and prostatis (1). Other potential complications include gonococcal bacteremia, pharyngitis, and reactive arthritis. Chlamydia, gonorrhea, and trichomoniasis also facilitate the transmission of HIV infection (1, 4).



# Chlamydia, Gonorrhea & Trichomoniasis Information

### Who is at risk?

Any sexually active individual is at risk of chlamydia, gonorrhea or trichomoniasis, with an increased risk among younger individuals. These three STDs are the most prevalent STDs in the United States. There are estimated to be 3.7 million individuals with trichomoniasis in the United States (12). Annual chlamydia cases are estimated to be around 2.86 million (5), and 583,405 gonorrhea cases were reported to the CDC in 2018 (13).

## How are these STDs diagnosed?

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

# How are chlamydia, gonorrhoea and trichomoniasis treated?

Chlamydia, gonorrhea, and trichomoniasis are easily cured with antibiotics (12). However, repeat 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 infections.

## How do I reduce my risk?

Abstaining from vaginal, anal, or oral sex is the only way to completely avoid STDs, such as chlamydia, gonorrhea and trichomoniasis. 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.

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