

Gonorrhea, Chlamydia, and Syphilis

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What are gonorrhea, chlamydia, and syphilis?

Gonorrhea, chlamydia, and syphilis are *sexually transmitted infections (STIs)*. These three STIs can cause serious, long-term problems if they are not treated, especially for teenagers and young women.

What causes gonorrhea and chlamydia?

Both gonorrhea and chlamydia are caused by bacteria. The bacteria are passed from one person to another through vaginal, anal, or oral sex. Gonorrhea and chlamydia often occur together.

Where do these infections occur?

Gonorrhea and chlamydia infections can occur in the mouth, reproductive organs, *urethra*, and rectum. In women, the most common place is the *cervix* (the opening of the *uterus*).

At what age do these infections most commonly occur?

Although gonorrhea and chlamydia can occur at any age, young women and teenagers who are sexually active are at greater risk of both infections.

What are the symptoms of gonorrhea and chlamydia?

Women with gonorrhea or chlamydia often have no symptoms. When symptoms from either infection do occur, they may show up 2 days to 3 weeks after infection. They may be very mild and can be mistaken for a urinary tract or vaginal infection.

The most common symptoms in women include the following:

- A yellow vaginal discharge
- Painful or frequent urination
- Vaginal bleeding between menstrual periods
- Rectal bleeding, discharge, or pain

How are gonorrhea and chlamydia diagnosed?

To find out if you have gonorrhea or chlamydia, your health care professional may take a sample of cells from your throat, cervix, urethra, or rectum where the infection may occur. Gonorrhea and chlamydia also can be detected with a urine test.

What complications are associated with infection with gonorrhea and chlamydia?

Both gonorrhea and chlamydia can cause *pelvic inflammatory disease (PID)*, an infection that occurs when bacteria move from the vagina and cervix upward into the uterus, *ovaries*, or *fallopian tubes* (see FAQ007 "Pelvic Inflammatory Disease [PID]"). After a woman is infected with gonorrhea or chlamydia and if she does not receive treatment, it can take anywhere from a few days to a few weeks before she develops PID.

How is infection with gonorrhea and chlamydia treated?

Gonorrhea and chlamydia are treated with **antibiotics**. You will need to be retested 3 months after treatment to see if the infection is gone.

What causes syphilis?

Syphilis also is caused by bacteria. It differs from gonorrhea and chlamydia because it occurs in stages. It is spread more easily in some stages than in others.

How is syphilis spread?

The bacteria that cause syphilis enter the body through a cut in the skin or through contact with a syphilis sore known as a *chancre*. Because this sore commonly occurs on the *vulva*, vagina, anus, or penis, syphilis most often is spread through sexual contact. It also can be spread by touching the rash, warts, or infected blood during the secondary stage of infection.

What are symptoms of syphilis?

Symptoms of syphilis differ by stage:

- Primary stage—Syphilis first appears as a painless chancre. This sore goes away without treatment in 3–6 weeks.
- Secondary stage—The next stage begins as the chancre is healing or several weeks after the chancre has disappeared, when a rash may appear. The rash usually appears on the soles of the feet and palms of the hands. Flat warts may be seen on the vulva. During this stage, there may be flu-like symptoms. This stage is highly contagious.
- Latent and late stages—The rash and other symptoms go away in a few weeks or months, but the disease still is present in the body. If untreated, the disease may return in its most serious form years later.

How is syphilis diagnosed?

In the early stages, discharge from open sores is examined to see if syphilis bacteria are present. In later stages, a blood test also can be done to check for **antibodies** to the bacteria.

What are complications of syphilis?

Late-stage syphilis is a serious illness. Heart problems, neurologic problems, and tumors may occur, leading to brain damage, blindness, paralysis, and even death. The genital sores caused by syphilis also make it easier to become infected with and transmit *human immunodeficiency virus (HIV)*.

How is syphilis treated?

Syphilis is treated with antibiotics. If it is caught and treated early, long-term problems can be prevented. The length of treatment depends on how long a person has had the disease.

Can these infections be prevented?

You can take steps to avoid getting gonorrhea, chlamydia, or syphilis. These safeguards also help protect against other STIs:

- Use a condom. Both male and female condoms are sold over the counter in drug stores. They help protect against STIs.
- Limit your sexual partners. The more sexual partners you have over a lifetime, the higher your risk of getting STIs.
- Know your partner. Ask about your partner's sexual history. Ask whether he or she has had STIs. Even if your partner has no symptoms, he or she still may be infected.
- Avoid contact with any sores on the genitals.

Glossary

Antibiotics: Drugs that treat certain types of infections.

Antibodies: Proteins in the blood produced in reaction to foreign substances, such as bacteria and viruses that cause infection.

Cervix: The lower, narrow end of the uterus at the top of the vagina.

Chancre: A sore caused by syphilis and appearing at the place of infection.

Fallopian Tubes: Tubes through which an egg travels from the ovary to the uterus.

Human Immunodeficiency Virus (HIV): A virus that attacks certain cells of the body's immune system and causes acquired immunodeficiency syndrome (AIDS).

Ovaries: The paired organs in the female reproductive system that contain the eggs released at ovulation and produce hormones.

Pelvic Inflammatory Disease (PID): An infection of the uterus, fallopian tubes, and nearby pelvic structures.

Sexually Transmitted Infections (STIs): Infections that are spread by sexual contact, including chlamydia, gonorrhea, human papillomavirus, herpes, syphilis, and human immunodeficiency virus (HIV, the cause of acquired immunodeficiency syndrome [AIDS]).

Urethra: A tube-like structure through which urine flows from the bladder to the outside of the body.

Uterus: A muscular organ located in the female pelvis that contains and nourishes the developing fetus during pregnancy. *Vulva:* The external female genital area.

If you have further questions, contact your obstetrician-gynecologist.

FAQ071: Designed as an aid to patients, this document sets forth current information and opinions related to women's health. The information does not dictate an exclusive course of treatment or procedure to be followed and should not be construed as excluding other acceptable methods of practice. Variations, taking into account the needs of the individual patient, resources, and limitations unique to the institution or type of practice, may be appropriate.

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