



Chlamydia

(cla-MIH-dee-ah)

Chlamydia is a sexually transmitted bacterium. It can cause sterility in women and men. In women, it infects the cervix and can spread to the urethra, fallopian tubes, and ovaries. It can cause bladder infections and serious pelvic inflammatory disease, ectopic pregnancy, and sterility. In men, chlamydia infects the urethra and may spread to the testicles, causing epididymitis, which can cause sterility.

Chlamydia can also lead to reactive arthritis — especially in young men. One in three men who develop reactive arthritis become permanently disabled. In infants, chlamydia can cause pneumonia, eye infections, and blindness. Chlamydia is the most common and most invisible sexually transmitted bacterial infection in America. At least three million American men and women become infected every year.

Common symptoms:

- discharge from the penis or vagina
- pain or burning while urinating, frequent urination
- excessive vaginal bleeding
- painful intercourse for women
- spotting between periods or after intercourse
- abdominal pain, nausea, fever
- inflammation of the rectum or cervix
- swelling or pain in the testicles

Symptoms appear in seven to 21 days — if they appear. If your partner is a man, and he has a urinary tract infection, you may have chlamydia.

Seventy-five percent of women and 50 percent of men with chlamydia have no symptoms. Many women discover they have chlamydia only because their partners are found to be infected. Other women discover that they must have had it for some time when they are treated for the infertility that it can cause.

How chlamydia is spread:

- vaginal and anal intercourse
- from the birth canal to the fetus
- rarely, from the hand to the eye
- rarely, during oral sex

Diagnosis: Can be confused with gonorrhea and other conditions. Examination of tissue samples or urine is necessary for correct diagnosis.

Treatment: Both partners can be treated successfully with antibiotics. Follow-up testing may be suggested three to four months after treatment.

Protection: Condoms reduce the risk of infection with chlamydia.

Gonorrhea

(gone-o-RHEE-a)

Gonorrhea is a bacterium that can cause sterility, arthritis, and heart problems. In women, gonorrhea can cause pelvic inflammatory disease (PID), which can result in ectopic pregnancy or sterility. During pregnancy, gonorrhea infections can cause premature labor and stillbirth. To prevent serious eye infections that can be caused by gonorrhea, drops of antibiotics are routinely put into the eyes of newborn babies immediately after delivery. About 650,000 new cases of gonorrhea are reported every year in the U.S.

Common symptoms:

- for women: frequent, often burning, urination; menstrual irregularities, pelvic or lower abdominal pain; pain during sex or pelvic examination; a yellowish or yellow-green discharge from the vagina; swelling or tenderness of the vulva; and even arthritic pain.
- for men: a pus-like discharge from the urethra or pain during urination

Eighty percent of the women and 10 percent of the men with gonorrhea show no symptoms. If they appear at all, symptoms occur in women within 10 days. It takes from one to 14 days for symptoms to appear in men.

How gonorrhea is spread: vaginal, anal, and oral intercourse

Diagnosis: microscopic examination of urethral or vaginal discharges; cultures taken from the cervix, throat, urethra, or rectum. Urine tests are also available.



Treatment: Both partners can be successfully treated with oral antibiotics. Often people with gonorrhea also have chlamydia. They must be treated for both infections at the same time.

Protection: Condoms reduce the risk of infection with gonorrhea.

Hepatitis

(hep-ah-TIE-tis)

Hepatitis B virus (HBV) is a common sexually transmitted infection that can be prevented with vaccination. About 78,000 Americans get HBV every year because they have not been vaccinated. Sexual transmission of the hepatitis A virus (HAV) is less common. Unlike most sexually transmitted infections, a person with HAV also develops immunity against reinfection. Sex play has a limited role in the transmission of hepatitis C virus (HCV).

Although 90-95 percent of adults with HBV recover completely about five to ten percent of people who get HBV as adults will be "carriers" and have chronic (long-term) infection with HBV. Chronic HBV infection can cause severe liver disease and death. Unless they are treated at birth, 90 percent of the infants born to women with HBV will carry the virus. Pregnant women who may have been exposed to HBV should be tested before giving birth so that their babies can be vaccinated at birth or treated if they become ill.

Common symptoms:

- extreme fatigue, headache, fever, hives
- lack of appetite, nausea, vomiting, tenderness in the lower abdomen

Later symptoms: more abdominal pain, dark urine, clay-colored stool, yellowing of the skin and white of the eye — jaundice

Hepatitis may be invisible during its most contagious phases.

How HBV is spread

in semen, saliva, blood, and urine by:

- intimate and sexual contact, from kissing to vaginal, anal, and oral intercourse
- use of unclean needles to inject drugs
- accidental pricks with contaminated needles in the course of health care

- sharing personal hygiene utensils such as toothbrushes and razors

How HAV is spread:

oral contact with fecal matter through:

- oral/anal sex play
- other kinds of sex play
- sharing needles with intravenous drug use

Hepatitis A and B are very contagious. However, HAV infection is contagious for only a short period of time.

Diagnosis: blood test

Treatment: In most cases the infection clears within four to eight weeks. Some people, however, remain infected and contagious for the rest of their lives. There are three drugs that can help treat chronic HBV — adefovir dipivoxil, alpha interferon, and lamivudine.

Protection: Condoms may offer limited protection against hepatitis during vaginal, anal, and oral intercourse. Latex or plastic barriers can be used during oral/anal or oral/vulvar contact. But the virus can be passed through kissing and other intimate touching. **Children and adults who do not have HBV can get permanent protection with a series of HBV vaccinations.** There is also a vaccine for HAV that is recommended for people who may be at risk of infection.

Herpes

(HER-pee-z)

There are two forms of genital herpes — herpes simplex virus-1 and herpes simplex virus-2. Although herpes-1 is most often associated with cold sores and fever blisters, both forms of herpes may be sexually transmitted. In fact, most adults have herpes simplex virus (HSV), either type 1 or type 2, or both. During pregnancy, herpes may cause miscarriage or stillbirth. If active herpes infections are present during childbirth, newborn infants may suffer serious health damage, including developmental disabilities and, rarely, death. Transmission to a newborn is more common during the first episode of the herpes infection and less common during recurrent herpes outbreaks. More than 45 million Americans have been diagnosed with genital herpes. At least one million new cases are diagnosed every year. Like many other viruses, the HSV remains in the body for life.



Common symptoms:

- a recurring rash with clusters of itchy or painful blistery sores appearing on the vagina, cervix, penis, mouth, anus, buttocks, or elsewhere on the body
- painful ulcerations that occur when blisters break open
- The first outbreak may cause pain and discomfort around the infected area, itching, burning sensations during urination, swollen glands in the groin, fever, headache, and a general run-down feeling.

Symptoms usually appear from two-20 days after infection — but it may be years before an outbreak occurs.

Recurrences are sometimes related to emotional, physical, or health stresses. During recurrences, it is important to observe strict rules of day-to-day hygiene. Wash hands frequently and do not touch the sores. If the sores are touched inadvertently, wash hands immediately. Be particularly careful when handling contact lenses and touching the eyes.

How HSV is spread:

- touching, sexual intimacy — including kissing
- vaginal, anal, and oral intercourse

HSV may be passed from one partner to another, or from one part of the body to another, whenever contact is made with an active herpes virus. Oral sex play can pass herpes from the mouth to the genitals or from the genitals to the mouth.

HSV is most contagious from the time the sores are present until they are completely healed and the scabs have fallen off. Some people may be contagious at various times when they have no symptoms. Mucous membranes of the mouth, anus, vagina, penis, and the eyes are especially susceptible to infection.

Diagnosis: Can be confused with syphilis, chancroid, and other sexually transmitted infections. Definitive diagnosis is possible by laboratory culturing of fluid samples taken from the sores or by blood test.

Treatment: No cure. Symptoms can be relieved and the number of recurrences reduced with the drugs valacyclovir, acyclovir, and famciclovir.

Protection: Partners should refrain from sexual intimacy from the time they know the blisters are going to recur until seven days after the scabs have

completely fallen off the healed sores. Condoms reduce the risk of transmitting the virus between outbreaks.

Human Papilloma Virus

(pap-ill-LOW-mah)

There are more than 100 different human papilloma viruses (HPVs). They cause a variety of warts and other conditions and can remain in the system for life. Studies suggest that as many as three-quarters of adults in the U.S. have been infected with at least one type of HPV. Thirty of these HPVs are genital and affect sexual and reproductive organs. A few cause genital warts, but most genital HPV infections are not visible and have no symptoms. Some of these cause cancer of the cervix, vulva, or penis. Every year, more than five million Americans are newly infected with genital HPVs — about 20 million women and men are now infected.

Common symptoms:

- Warts appear on the genitals, in the urethra, in the anus, and, rarely, in the throat.
- Genital warts are soft to the touch, may look like miniature cauliflower florets, and often itch.
- Untreated genital warts can grow to block the openings of the vagina, anus, or throat and become quite uncomfortable.

It usually takes two to three weeks after infection for warts to develop. Genital warts grow more rapidly during pregnancy or when other infections are present.

How genital HPVs are spread:

- vaginal and anal intercourse
- very rarely, to the fetus during childbirth.
- oral sex

Diagnosis:

- microscopic examination of tissue or fluid samples
- clinical evaluation of warts during a physical or gynecological exam
- Special magnifiers — colposcopes — can detect genital HPVs that cannot be seen with the naked eye during pelvic exams.
- Pap tests may reveal precancerous conditions caused by genital HPVs — early treatment prevents cancer of the cervix.



Treatment: No cure for HPV. Though they may recur, genital warts can be treated in a number of ways. They may be removed by carefully applying, and often reapplying, a prescription medication — podofilox or imiquimod — to the wart. Clinicians offer other treatments, including:

- application of podophyllin or acid
- standard surgery
- laser surgery (vaporizing the wart with a beam of high-powered light)
- cryosurgery (freezing the wart with liquid nitrogen)
- injection of interferon

Protection: Condoms reduce the risk of genital warts and cervical cancer, but the virus may "shed" beyond the area protected by condoms.

Pelvic Inflammatory Disease (PID)

(PID is a progressive infection that harms a woman's reproductive system. PID occurs throughout the pelvic area, in the fallopian tubes, the uterus, the lining of the uterus, and in the ovaries. Especially if untreated, PID can lead to sterility, ectopic pregnancy, and chronic pain. The more episodes of PID a woman has, the greater are her chances of becoming infertile. PID is not always the result of a sexual transmitted infection — but in most cases it is. The sexually transmitted infections that most commonly cause PID are gonorrhea and chlamydia. More than 1,000,000 U.S. women have an acute episode of PID every year. It is believed that millions of other cases go undiscovered.

Common symptoms:

- unusually long or painful periods, and unusual vaginal discharge
- spotting and pain between menstrual periods or during urination
- pain in the lower abdomen and back
- fever, chills
- nausea, vomiting
- pain during intercourse

Treatment: Antibiotics, bed rest, and sexual abstinence. Surgery may be required to remove abscesses or scar tissue, or to repair or remove reproductive organs.

Diagnosis:

- pelvic exam

- microscopic examination and/or culture of vaginal and cervical secretions
- laparoscopy — an optical instrument is inserted through a small cut in the navel to look at the reproductive organs

Symptoms can be confused with those of appendicitis and other infections. Diagnosis can be difficult if patients are too embarrassed to admit sexual activity.

Protection: Condoms reduce the risk of infections commonly associated with PID.

Syphilis

(SIF-i-lis)

Untreated, the syphilis organism — spirochete — can remain in the body for life and lead to disfigurement, neurologic disorder, or death. There are 70,000 new cases each year in the U.S.

Common symptoms

Syphilis has several phases that may overlap one another. They do not always follow in the same sequence. Symptoms vary with each phase, but there are no symptoms most of the time.

- **Primary Phase:** Painless sores or open, wet ulcers — chancres — often appear from three weeks to 90 days after infection. They last three to six weeks. They appear on the genitals, in the vagina, on the cervix, lips, mouth, or anus. Swollen glands may also occur during the primary phase.
- **Secondary Phase:** Other symptoms often appear from three to six weeks after the sores appear. They may come and go for up to two years. They include body rashes that last from two to six weeks — often on the palms of the hands and the soles of the feet. There are many other symptoms, including mild fever, fatigue, sore throat, hair loss, weight loss, swollen glands, headache, and muscle pains.
- **Latent Phase:** No symptoms. Latent phases occur between other phases.
- **Late Phase:** One-third of untreated people with syphilis suffer serious damage to the nervous system, heart, brain, or other organs, and death may result.



How syphilis is spread:

- vaginal, anal, and oral intercourse
- kissing
- to the fetus during pregnancy

Syphilis is especially contagious when sores are present early in the disease — the liquid that oozes from them is very infectious. People are usually not contagious during the latent phases of the first four years of syphilis infections. Untreated syphilis remains latent for many years or a lifetime, but can be spread from a pregnant woman to her fetus.

The effect of syphilis on a fetus is very serious. If untreated, the risks of stillbirth or serious birth defects are high. Birth defects include damage to the heart, brain, and skeleton as well as blindness. It is very important for pregnant women to consider testing for syphilis early, and, sometimes, throughout their pregnancies. Pregnant women with syphilis can be treated to prevent damage to the fetus.

Diagnosis:

- microscopic examination of fluid from sores
- blood tests
- examination of spinal fluid

Treatment: Antibiotics are successful for both partners — but damage caused by the disease in the later phases cannot be undone.

Protection: Condoms reduce the risk of infection with syphilis during vaginal, anal, and oral intercourse.