

SEXUALLY TRANSMITTED DISEASES

Sexually transmitted Diseases, or STDs, are usually spread from one person to another through sexual intercourse. STDs may be asymptomatic (not show any symptoms) in many individuals. In fact, many of the people who have a STD are unaware of it and therefore do not seek treatment, increasing the risk of infecting their partners. For this particular reason, the term STIs, or sexually transmitted infections, is commonly used today. It is extremely important for **individuals who are sexually active** to be **regularly screened for STDs**, because an infected person may pass on the infection to another before showing symptoms of a disease.

Who is at risk for STDs?

Anybody can contract a STD. The most at risk group are young teens and adolescents ages 15-24. Factors that increase the risk for getting STDs include:

- Unprotected sex
- Multiple sexual partners
- Having sex with a partner whose sexual history you do not know
- Becoming sexually active at a young age
- Tobacco and alcohol use
- Stress and other viral or bacterial infections at the same time

Transmission of STDs:

STDs are usually transmitted through sexual intercourse, including oral, anal, and vaginal sex. Some infections can be transmitted through non-sexual or intimate skin contact.

Prevention of STDs:

While the only way to completely prevent getting STDs is to abstain from sex or not have sex, you can significantly reduce the risk of exposure by using a condom and practicing safe sex.

Testing for STDs:

Even if you do not experience any signs or symptoms, **routine testing is an important way to protect yourself against STDs**. An annual physical or gynecologic exam usually does not include STD testing unless requested by the patient. Certain types of STDs can be tested together in one screening, while others may require different methods or schedules. Read the articles on common STDs for details, and be sure to discuss with your health care providers about your individual needs. If STD testing is not covered by your insurance, check with your county public health clinic or local Planned Parenthood office.

If tested positive for an STD, encourage your sexual partner or partners to get tested. Also consult with your doctors right away to make plans for further testing or treatments.

* San Francisco City Clinic: <http://www.sfcityclinic.org/>

* STD Test: <http://www.stdtest.org/>

Helpful resources:

- STDs Interactive Tutorial: U.S. National Library of Medicine
<http://www.nlm.nih.gov/medlineplus/tutorials/sexuallytransmitteddiseases/htm/index.htm>
- American Social Health Association: <http://www.ashastd.org/>
- Centers for Disease Control and Prevention: <http://www.cdc.gov/STD/>

Common STDs:

- Chlamydia
- Crabs
- Genital Warts
- Gonorrhea
- Hepatitis A, B, C
- Herpes
- HIV/AIDS
- Syphilis

CHLAMYDIA

What is it?

Chlamydia is the most common STD, caused by the bacterium *Chlamydia trachomatis*. Women are more likely to have the disease mainly because more women are being screened for the infection.

Signs and symptoms:

Many infected individuals show no symptoms and are unaware of the infection. If symptoms do occur, they usually appear within 1 to 3 weeks after exposure. In women, the bacterium initially infects the urinary tract. Infected women might experience an abnormal vaginal discharge or a burning sensation when urinating. When the infection spreads, symptoms include lower abdominal pain, low back pain, nausea, fever, bleeding, and pain during intercourse. Symptoms in men may include abnormal discharges from penis or a burning sensation when urinating. Infected individuals may also feel burning and itching around the opening of the penis. Pain and swelling in the testicles are uncommon. Men or women may also get chlamydial infection in the rectum, which can cause rectal pain, discharge, or bleeding. Chlamydia can also be found in the throats of women and men having oral sex with an infected partner.

Diagnosis:

Chlamydia can be tested along with gonorrhea (another STD) through either a urine sample or a swab of a potentially infected organ: the cervix in women or penis in men, for example.

Medical complications:

If left untreated, chlamydia can cause serious problems in the reproductive organs. For women, the most common result is pelvic inflammatory disease (PID). The damage, in turn, can lead to chronic pelvic pain,

infertility, and potentially fatal ectopic pregnancy (pregnancy outside the uterus). Complications for men, although rare, can also lead to infertility. Chlamydia also greatly increases the risk of becoming infected with HIV (AIDS virus).

Treatment:

The usual treatment for chlamydia is antibiotics, which requires a doctor's prescription.

CRABS

What is it?

Crabs is the common term for a lice infection that is usually found in the pubic hair of humans. The organism responsible for pubic lice is *Phthirus pubis*. Barely the size of a pinhead, lice are parasites that feed exclusively on blood. Infection of other areas such as the head or body is caused by similar species of lice.

Signs and symptoms:

The main symptoms of crabs are itching and burning of the infected areas. The infection may also spread to other moist areas such as the armpits. Many people who have crabs claim that the itching worsens at night.

Diagnosis:

Diagnosis includes an examination of the pubic area. Presence of lice or lice eggs indicates an infection.

Transmission:

The source of infection for pubic lice is intimate, skin-to-skin contact with an infected person. Actual sexual intercourse is not necessary for the spread of pubic lice. Pubic lice can also be transmitted by contact with contaminated belongings such as towels, bed sheets, or clothing.

Treatment:

Pubic lice can be treated at home with Permethrin 1-5%. These products are available over-the-counter without a prescription at a local drug store or pharmacy. After a 10 minute application of the infected area, rinse off with warm water. Next, remove eggs using a fine comb, which can also be obtained commercially. Be sure to do a follow-up application 7-10 days later to kill off any lice that may have hatched after the initial treatment. The itching, which is a result of hypersensitivity to lice saliva, can be treated using anti-histamine allergy medications such as Benadryl. Talk to a doctor or pharmacist for details.

GENITAL WARTS

What is it?

Genital warts or venereal warts are wart-like growths on the genitals caused by Human Papilloma Virus (HPV). Genital warts are one of the most common types of STDs. Genital warts are small, flesh-colored or gray lesions on the penis, vagina, anus, or surrounding skin. They may be as small as 1 millimeter or may

cluster into larger cauliflower shape. Genital warts can also develop in the mouth or throat of a person who has had oral sexual contact with an infected person.

Signs and symptoms:

Symptoms are rare, but they can include itching or discomfort in the genital area, abnormal vaginal bleeding with intercourse, increased dampness in the area of the growths, and increased vaginal discharge.

Diagnosis:

Diagnosis is made based on visual inspection or biopsy of the warts. Women are recommended to receive routine exams to screen for this and other sexually transmitted diseases. Talk to your doctor about the right screening schedule for you.

Transmission:

Genital warts can spread through skin-to-skin contact with any infected part of the body, but using a condom can significantly reduce the risk of contracting the virus. If warts are visible on the genital area, avoid sexual contact until the warts are treated. If you have developed genital warts for the first time, inform your sexual partner so that he or she can be screened for the infection.

Prevention:

A vaccine called *Gardasil* offers protection against HPV strains 6 and 11, which are the types of HPV that are responsible for 90% of genital wart cases. *Gardasil* also blocks HPV types 16 and 18, which are not associated with genital warts but are the cause for 70% of cervical cancer cases. This vaccine is recommended for girls ages 11 and 12, as well as females ages 13 to 26 who have not yet received the vaccine. Vaccination includes a series of 3 injections over a 6-month period. To be most effective, the vaccine should be given before a person starts to have sex, because it only works to prevent HPV infection and will not treat an infection that is already there. It is also important to understand that this vaccine does not protect against all types of HPV, and it would not completely prevent genital warts. Routine screenings are still necessary.

Treatment:

Although the underlying virus cannot be completely eliminated, your doctor can help you clear an outbreak of warts with medications or surgical treatment. Don't try to treat genital warts with over-the-counter medications, as they are not intended for use on the genital area and can cause even more pain and irritation.

GONORRHEA

What is it?

Gonorrhea, commonly referred to as "the clap", is the second most common STD after chlamydia. The highest reported rates of infection are among sexually active teenagers and young adults. Gonorrhea is caused by *Neisseria gonorrhoeae*, a bacterium that can grow and multiply easily in the warm, moist areas of the reproductive tract in both men and women. The bacteria can also grow in the mouth, throat, eyes, and anus. Therefore, the spread of gonorrhea usually follows after contact with those infected regions. Gonorrhea can also be spread from mother to baby during delivery.

Signs and symptoms:

Just like chlamydia, those infected with gonorrhea show little or no symptoms or signs of infection. In men, signs or symptoms may appear 2-5 days after infection; while some others can take as long as 30 days to appear. Symptoms and signs include a burning sensation when urinating, or a white, yellow, or green discharge from the penis. Sometimes men with gonorrhea get painful or swollen testicles.

In women, the symptoms of gonorrhea are often mild, and most women who are infected have no symptoms. Even when a woman has symptoms, they can be so non-specific as to be mistaken for a bladder or vaginal infection. The initial symptoms and signs in women include a painful or burning sensation when urinating, increased vaginal discharge, or vaginal bleeding not due to menstrual periods. Women with gonorrhea are at risk of developing serious complications from the infection, regardless of the presence or severity of symptoms.

Symptoms of rectal infection in both men and women may include discharge, anal itching, soreness, bleeding, or painful bowel movements. Rectal infection may have no symptoms. Infections in the throat may cause a sore throat or no symptoms at all.

Diagnosis:

Gonorrhea can be tested along with Chlamydia (another STD) through either a urine sample or a swab of a potentially infected organ: the cervix in women or penis in men, for example.

Medical Complications:

If left untreated, gonorrhea can cause serious and permanent health problems in both women and men. In women, gonorrhea is a common cause of pelvic inflammatory disease (PID). PID can lead to chronic pelvic pain, infertility, and a life-threatening condition known as ectopic pregnancy (pregnancy outside the uterus). Complications for men, although rare, can also lead to infertility.

Gonorrhea can spread to the blood or joints. This condition can be life threatening. In addition, people with gonorrhea can contract HIV, the virus that causes AIDS more easily. HIV-infected people with gonorrhea can transmit HIV more easily to someone else than if they did not have gonorrhea.

Treatment:

In most cases, once detected, gonorrhea can easily be treated with antibiotics. If symptoms continue even after receiving treatment, the patient should return to the doctor to be reevaluated.

HEPATITIS

What is it?

Hepatitis comes from the Greek word for inflammation of the liver. There are seven different strains of the hepatitis virus (A through G). Strains A, B, and C are the ones that can be transmitted sexually. All forms of hepatitis attack the liver.

Signs and symptoms:

While it takes weeks or even months for symptoms to appear, the infected person will become ill and develop symptoms when the disease begins to impair liver functions. Symptoms of hepatitis include:

- Short, mild, flu-like illness
- Nausea, vomiting and diarrhea
- Loss of appetite
- Weight loss
- Jaundice (yellow skin and whites of eyes, darker yellow urine and pale feces)
- Itchy skin
- Abdominal pain

Diagnosis:

Blood tests are used to detect the presence of hepatitis A, B, or C. If the result is positive, a liver biopsy may be recommended by your doctor to determine the severity of the disease and treatment options.

Hepatitis A

Hepatitis A is the most common type of hepatitis. It is transmitted through the ingestion of infected fecal matter. The infection occurs mostly in developing countries with unsanitary living conditions. Sexually, hepatitis A is usually passed on through oral to anal sex. There is no specific treatment to cure this infection, but there is a vaccine to protect against hepatitis A.

Hepatitis B

The symptoms for hepatitis B are very similar to hepatitis A except that they can cause chronic illness and permanent damage to the liver. Hepatitis B is transmitted by blood. An infected mother can pass on the disease to her baby while giving birth. Hepatitis B can also be transmitted through unsterilized needles for body piercing, tattoos, and acupuncture, or through unprotected sex with an infected person. There is a vaccine to protect against hepatitis B.

For chronic hepatitis B infection, there is no treatment at this time to completely cure the infection. However, there is a list of medications approved by the FDA (Food and Drug Administration) to stop the hepatitis B virus from multiplying. Not all chronically infected persons need to be on medications, and certain medications do not work for all individuals. If you have developed chronic hepatitis B, it is important for you to see your doctor routinely to monitor your liver function and progression of the disease. Your doctor will inform you when drug treatment becomes necessary.

Hepatitis C

Hepatitis C is more difficult to treat than hepatitis A and B and usually leads to chronic illness. Hepatitis C is usually transmitted through blood. This most often occurs when sharing infected needles to inject drugs and in developing countries where blood used for transfusion is not screened. Transmission can also occur through unprotected sex with an infected person. An infected mother can, although rarely, pass it on to her child at birth. There is currently no vaccine to protect against hepatitis C but there are drugs to help treat the infection.

Not all individuals infected with hepatitis C need to receive treatment. If drug therapy is needed, there are several FDA-approved medications that help clear the virus from the body. These medications have side effects and may not be appropriate for every patient. Discuss with your doctor about the need for treatment, and the pros and cons of each option.

HERPES

What is it?

Herpes is a disease caused by the Herpes Simplex Virus type 1 (HSV-1) or type 2 (HSV-2). Oral and genital herpes are the two most common forms. Oral herpes causes blisters, commonly called cold sores, to form on the face and around the mouth. Genital herpes, on the other hand, has no or minimal signs or symptoms. Most people with herpes never have sores, or they have very mild signs that they do not even notice or they mistake the sores for insect bites or another skin condition. When more serious signs do occur, they typically appear as one or more blisters on or around the genitals or rectum. The blisters break, leaving a tender sore that may take two to four weeks to heal the first time they occur. Typically, another outbreak can appear later on (weeks or even months after the first outbreak), but it is almost always less severe and shorter than the first outbreak. The number of outbreaks tends to decrease over a period of years. After the initial infection, the herpes virus hides away in sensory nerves where it usually remains dormant until another outbreak. The causes for these recurrences are unknown although some studies point to stress as a possible trigger.

Diagnosis:

If you have outbreaks that you suspect are due to herpes, your doctor can scrape a small sample from the blisters for further examination. A blood test can also help to diagnose a herpes infection.

Transmission:

Herpes is usually transmitted through contact with an open sore. This usually involves intimate contact with the infected area from vaginal, oral, or anal sex. However, there are cases where the virus is passed from an infected person who does not have a visible sore and may not know that he or she is infected.

Prevention and treatment:

There is currently no cure for herpes; no vaccine is available to prevent or eliminate this disease. However, medications can be taken to reduce the risk of spreading the virus and to help ease the painful symptoms. Condoms can also greatly reduce the rate of transmission. However, its effectiveness is limited, as it usually does not completely cover all blisters around the genitals.

HIV/AIDS

What is it?

Human immunodeficiency virus (HIV) is a destructive virus that attacks the body's immune system.

Who is at risk?

Anyone of any age, race, gender, or sexual orientation can be infected with HIV. And similar to the other STDs, certain sexual behaviors, such as having unprotected sex or multiple sexual partners, increase one's risk of infection. HIV/AIDS has become a pandemic (widespread) disease, not only in the U.S. but also worldwide.

Signs and symptoms:

After an initial HIV infection, some people show no signs or symptoms, while others show flu-like illnesses, including fever, headache, sore throat, and swollen lymph glands. Early symptoms usually disappear within a few days or weeks, and then the infected person may remain symptom-free for as long as 10 or more years. During this period of time, however, the virus continues to attack the body's immune system, making the body less able to defend against other infections. The infected person may experience swollen lymph nodes, fever, diarrhea, weight loss, or cough and shortness of breath.

In a later and more advanced stage of HIV infection, some individuals develop AIDS—acquired immunodeficiency syndrome—which is a potentially fatal condition resulting from an impaired immune system. The person may experience persistent fatigue, shaking chills or severe fever, soaking night sweats, swollen lymph nodes, chronic diarrhea, and others. Without the proper means to protect itself, the body also becomes extremely vulnerable to infections and diseases, including cancer.

Diagnosis:

Diagnoses are made by testing the blood or oral mucus for presence of antibodies to the virus. Since it takes the body 2 to 12 weeks after exposure (or up to 6 months for some people) to develop the antibodies, tests received within this time period may not be able to detect all cases of infection. If you think you have been exposed to HIV, and your test results are negative, be sure to get retested in 3 to 6 months.

Transmission:

A person infected with HIV can transmit the virus to others at any time, even when no signs or symptoms are shown. HIV can be spread through:

- Unprotected sex – Vaginal, oral, or anal.
- Sharing needles – Needles for drugs, blood, or tattoos
- Receiving infected blood – Although almost all blood in developed countries like the U.S. are screened for HIV
- Mother to child – Through birth or breast milk.

Prevention:

Because there is no cure for AIDS, prevention is the best weapon. Minimizing high-risk behaviors will help reduce the risk of exposure. Use a condom during sex. At a tattoo parlor, be sure to check if needles are sterilized before they are used again. If you are an expectant mother with HIV, talk to your doctor about what your options are.

All adolescents and adults ages 13 to 64 should receive routine testing, and yearly testing is recommended for those at high risk of infection. If tested HIV-positive, talk to your doctors right away about treatment options and encourage your sexual partner or partners to be screened.

Treatment:

While there is currently no vaccine or cure for HIV or AIDS, medications can be taken to limit the growth of the virus, helping to prolong the life of the infected person.

Helpful Resources:

- Center for Disease Control and Prevention: <http://www.cdc.gov/hiv/default.htm>
- Averting HIV and AIDS: <http://www.avert.org/>

SYPHILIS

What is it?

Syphilis is a sexually transmitted disease (STD) caused by the bacterium *Treponema pallidum*. The latest statistics show that the number of cases of syphilis is on the rise.

Signs and Symptoms:

Early signs of syphilis include one or multiple lesions (called sores) on the site of infection, which usually occurs around the genitals but can also be around the lips and in the mouth. The sore is usually firm, round, small, and painless, and typically disappears without treatment. However, the underlying disease remains and may later progress to cause rash on other body parts. In some people, the bacteria just remain latent (dormant) in the body for years without causing further signs or symptoms. But if left untreated, the infection can lead to complications including organ damages, gradual blindness, movement disorders, paralysis, and even death. The presence of syphilis also increases a person's risk, by 2 to 5 folds, of getting and transmitting HIV.

Diagnosis:

If you have sores that you suspect are due to syphilis, your doctor can scrape a small cell sample from a sore for further examination. During the latent period when there are no signs or symptoms, blood tests can be used to diagnose an infection.

Transmission:

Syphilis is passed on through contact with the lesions (the sores) of an infected person. Rarely, the infection can be passed from a mother to her child during birth. Many people infected with syphilis do not have any symptoms for years, and when symptoms do appear they are usually mild or are confused with symptoms of other diseases. As a result, transmission usually occurs from people who are unaware of their infection. Getting screened regularly, and encouraging your partner to do the same, can significantly help prevent the spread of syphilis, as well as other STDs.

Treatment:

Early diagnosis can be easily treated with penicillin or another antibiotic. If left untreated, however, the disease can lead to serious complications or death.