

Sexually Transmitted Diseases: An Overview

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Sexually Transmitted Diseases or Sexually Transmitted Infections impact the lives of millions of Americans. Some STIs only infect the genital area while others infect the whole body. Some people with STIs have no symptoms, while others experience painful symptoms and embarrassing sores. Because STIs are often undetected in the general population, regular or annual testing is recommended for populations that engage in at-risk sexual activity. Your physician may recommend more frequent testing based on risk.

There are several different types of STIs. The most common are:

Chlamydia

Chlamydia trachomatis is a sexually transmitted bacterial infection spread during vaginal, anal or oral sex with someone who has chlamydia. Untreated, it can lead to Pelvic Inflammatory Disease, tubal factor infertility, ectopic pregnancy, and chronic pelvic pain. Additionally, a mother with chlamydia can give it to her baby during childbirth. Chlamydia is the most frequently reported STI in the United States. Symptoms show up 7-28 days after having sex. Most women and some men have no symptoms.

Symptoms for Women: vaginal discharge, bleeding from the vagina between periods, burning/pain during urination, frequency of urination, pain in the abdomen (sometimes with fever and nausea).

Symptoms for Men: watery white drip from the penis, burning/pain during urination, frequency of urination, swollen or tender testicles.

Diagnosis: Chlamydia is diagnosed by obtaining either a vaginal swab or urine for women, and a urine sample from men, and are sent to a lab for diagnosis.

Treatment: Chlamydia is treated with antibiotics (either a single dose or 7 day course) and patients are asked to abstain from sex for 7 days. Re-testing should occur 3 months post-treatment. Some healthcare providers provide EPT (expedited partner therapy) to help partners get treated quickly.

Prevention: condoms, when used correctly, can reduce the risk of chlamydia. Other prevention measures include abstinence from sex, screening partners for history of STIs, and use of barrier methods to decrease contact transmission risk; and if you do engage in sex, limit the number of sex partners.

Gonorrhea

Gonorrhea is a sexually transmitted disease caused by infection with the Neisseria gonorrhoea bacterium. Gonorrhea infects the mucous membranes of the reproductive tract including the cervix, uterus, and fallopian tubes in women, and the urethra in men and women. It can also affect the mucous membranes of the mouth, throat, eyes and rectum. Most women and some men are asymptomatic for gonorrhea. For those that do have symptoms, they show up 2-21 days after sex.

Symptoms for Women: thick gray or yellow discharge from the vagina, burning or pain during urination/bowel movement, abnormal periods, bleeding between periods, cramps and pain in the lower abdomen.

Symptoms for Men: thick yellow or greenish drip from the penis, burning/pain during urination/bowel movement, frequency of urination, swollen or tender testicles.

Diagnosis: both men and women can be tested with a urine sample. Swab testing can also be used with women vaginally, men and women (anal), and a throat swab for both men and women.

Treatment: dual therapy is recommended for treatment of Gonorrhea. This typically is ceftriaxone (single dose injection) and azithromycin (oral single dose). Re-testing should occur 3 months post treatment. Individuals are asked to wait 7 days post treatment to have sex.

Adverse Reactions: these can occur with persons with a history of penicillin allergy.

Prevention: latex condoms reduce the spread of Gonorrhea. Other prevention measures include abstinence from sex, screening partners for history of STIs, and use of barrier methods to decrease contact transmission risk; and if you do engage in sex, limit the number of sex partners.

Herpes

Genital Herpes is an infection that is spread via sexual contact through exposure to open skin (sores/ lesions) to intact skin, or genital/oral secretions. It is rarely from shedding of the skin that looks normal. Transmission often occurs from an infected partner who does not have visible sores and may not know he/she is infected. Long-term complications from Herpes are rare, but Herpes can cause blindness, encephalitis, aseptic meningitis, or extragenital lesions. Herpes can be passed from mother to baby during pregnancy. Most people with Herpes have no symptoms. If a person does have symptoms, they show up 1-3 days or longer after having sex.

Symptoms for Women and Men: flu like feelings, small painful blisters on the sex organs or mouth, itching or burning before the blisters appear, blisters lasting 1-3 weeks. The blisters can return at a later time.

Diagnosis: diagnosis of Herpes requires a collection of a sample from a sore that is sent to a lab to be processed. Blood testing to detect the herpes antibodies can also be given.

Treatment: antiviral medications can prevent or shorten herpes outbreaks. In addition to this, daily use of antiviral medication can reduce the chance of recurrence, and the likelihood of transmission to partners.

Prevention: latex condoms can reduce the risk of genital herpes, however outbreaks can occur in areas not covered by a condom. It is important to abstain from sexual activity when sores are present, however herpes can still be transmitted even when no symptoms are present. Other prevention measures include abstinence from sex, screening partners for history of STIs, and use of barrier methods to decrease contact transmission risk; and if you do engage in sex, limit the number of sex partners.

Trichomoniasis

Trichomoniasis is a sexually transmitted disease caused by a parasite called trichomonas vaginalis. In women, the most commonly affected area is the lower genital tract, and in men it is

in the urethra. Many people have no symptoms, however those that do have symptoms show up 5-28 days after having sex.

Symptoms for Women: burning, itching in the vagina, and yellow/gray/greenish discharge from the vagina.

Symptoms for Men: watery/white drip from the penis, burning/pain when urinating, and frequency in urination.

Diagnosis: a lab test, in combination with a physical exam, is used to confirm this diagnosis. A sample of vaginal or urethral fluid is used for this test.

Treatment: a single dose of antibiotic (either metronidazole or tinidazole) taken orally. Refrain from sex until all the symptoms go away.

Prevention: latex condoms reduce the spread of Trichomoniasis. Other prevention measures include abstinence from sex, screening partners for history of STIs, and use of barrier methods to decrease contact transmission risk; and if you do engage in sex, limit the number of sex partners.

HPV

HPV is the Human Papilloma Virus. There are 100 types of this virus and 40 of them are sexually transmitted. These 40 types of HPV can affect the genital area (vulva, vagina, cervix, rectum, anus, penis or scrotum). Low risk types cause vaginal warts. High risk types may cause cell changes that can lead to cervical and certain other genital and throat cancers. Most types seem to have no harmful effect at all.

At any given time between 10-15 million people have high risk HPV. HPV is so common that about 50% of men and 75% of women have HPV at some point in their life. Most HPV infections go away within 8-13 months. HPV that does not go away can hide in the body for years. Condoms reduce the risk of HPV but are not 100% effective because HPV may be present in skin that is beyond the area covered by a condom.

Pap Test: detects abnormal cell changes and are observed by a lab professional looking through a microscope.

HPV Test: detects the virus that causes the abnormal cell changes. This is completed by a computer system that evaluates a sample of cervical cells.

Prevention: HPV Vaccine – this is a series of three separate injections over the course of 6 months. It protects against the two types of HPV that cause genital warts and 2-5 types of HPV that cause 70% of all cervical cancer. Vaccines should be given to both males and females from ages 9-26. Vaccine side effects include pain, swelling, itching, and redness at the injection site, fever, nausea, dizziness, vomiting and fainting. Other prevention measures include abstinence from sex, screening partners for history of STIs, and use of barrier methods to decrease contact transmission risk; and if you do engage in sex, limit the number of sex partners.

Treatment: there is no current treatment for HPV itself. Treatment is available for the abnormal cell changes caused by HPV (i.e. warts).

Hepatitis B

Hepatitis B is a liver infection caused by the Hepatitis virus. It is spread via sexual contact, needle sharing, through direct contact with infected blood, or from mother to baby at birth. For some, Hepatitis B is a short-term illness, but for others it can become a long-term chronic infection. 90% of infants infected become chronically infected, compared to 2-6% of adults. Untreated, it can lead to cirrhosis or liver cancer. Most women and men have no symptoms. For those that do, they show up 1-9 months post contact.

Men & Women: persistent flu like symptoms, tiredness, jaundice, dark urine, light colored bowel movements.

Diagnosis: Hepatitis B is diagnosed through a blood test, sent to a lab for confirmation.

Treatment: there is no medication available to treat Hepatitis B. Rest, adequate nutrition and fluids help some people. Patients with chronic Hepatitis B are referred to physicians that monitor for liver disease.

Prevention: the Hepatitis B vaccine is usually given in a series of 3-4 shots over a 6 month period. Both children and adults can be vaccinated. In the US, this vaccine is typically given to newborns. Other prevention measures include abstinence from sex, screening partners for history of STIs, and use of barrier methods to decrease contact transmission risk; and if you do engage in sex, limit the number of sex partners.

Syphilis

Syphilis is a sexually transmitted infection caused by the bacteris *trepomena pallidum*, with serious consequences if left untreated. Transmission can occur through vaginal, anal, or oral sex when the person without syphilis is exposed to a chancre in the genital area or on the lips/mouth. Pregnant women can transmit this disease to their unborn child.

Symptoms occur in several stages, and are the same for women and men:

1st Stage: 1-2 weeks after having sex symptoms include a painless sore or sores on the mouth or sex organs. Sores last 2-6 weeks and go away, however syphilis still remains.

2nd Stage: symptoms show up as the sore heals. A rash appears anywhere on the body. Flu like symptoms. Both go away, however syphilis still remains.

Latent Stages: although no outward symptoms may occur for years, untreated persons may experience damage to internal organs, muscle movement difficulties, paralysis, numbness, gradual blindness and dementia.

Diagnosis: two types of blood tests are given to diagnosis syphilis – Non treponemal and treponemal.

Treatment: a single injection of Benzathine penicillin G can cure those with first and second stage syphilis. Persons with latent stage syphilis must receive these injections for an unknown amount of time. Persons allergic to penicillin may receive doxycycline or tetracycline.

Prevention: latex condoms can reduce the risk of transmission of the disease, however, syphilis can still be transmitted by touching areas outside the condom. Other prevention measures include abstinence from sex, screening partners for history of STIs, and use of barrier methods to decrease contact transmission risk; and if you do engage in sex, limit the number of sex partners.

HIV/AIDS

Human Immunodeficiency Virus (HIV) is a virus that can be sexually transmitted or transmitted with needle sharing or other exposure to blood or body fluids from an infected individual. HIV is the virus that causes AIDS. This virus attacks the body's immune system. The body has a hard time fighting off infections and disease.

Opportunistic infections or cancers take advantage of the immune system and signal that the person has AIDS. HIV can be passed from mother to baby during pregnancy, childbirth, or breast feeding. Symptoms are the same for women and men. Symptoms may show up several months to several years after sexual contact.

Symptoms: unexplained weight loss/tiredness, flu like symptoms, diarrhea, white spots in the mouth, yeast infections that don't go away.

Diagnosis: initial blood test (Rapid HIV test) can be given with results given in a few minutes. If the results are positive, a second sample is taken and sent to a lab for confirmation. The results are returned within two weeks.

Treatment: HIV treatment is given with antiretroviral therapy (ART) and recommended for all people with HIV. ART slows the progression of HIV and reduces the chances of passing it on to others.

Prevention: pre-exposure prophylaxis (PrEP) is given to people at high risk for HIV and it significantly lowers their risk to contract AIDS. Other prevention measures include the use of a latex condom, abstinence from sex, screening partners for history of STIs, and use of barrier methods to decrease contact transmission risk; and if you do engage in sex, limit the number of sex partners.

About Planned Parenthood of Delaware

Planned Parenthood of Delaware has served the Delaware community for 85 years by providing high- quality reproductive health care regardless of a person's income level. This is an important component of our mission – to serve anyone regardless of ability to pay.

More than 60% of the patients we serve live at or below 150% of the federal poverty level, which was \$36,375 for a family of four in 2015. This makes the majority of our patients eligible for government programs such as Title X and Medicaid. Approximately 70% of our patients are between the ages of 18 and 29, half of our patients are people of color, and 10% of our patients are men.

Planned Parenthood of Delaware provided over 29,000 services in 2015. 94% of these services were for birth control, STD testing and treatment, breast and cervical cancer screenings, and other prevention services. 6% of services provided were for abortion care. For many of the women we serve, Planned Parenthood of Delaware is their only medical provider.

Delaware ranks in the top third among all states for incidence of STDs, including HIV and AIDS. Delaware ranks 12th for infection rates of syphilis (2013), 6th for incidence of chlamydia and gonorrhea (2013), 10th for incidence of HIV (2012), and 7th for incidence of AIDS (2012). In 2015, Planned Parenthood of Delaware provided 9,145 STD tests for both men and women (7806 women, 1339 men). We provided 928 HIV rapid tests for women and men (633 for

women and 295 for men), for a total of 10,073 STD tests. This represents almost 34% of the services we provide.

Planned Parenthood of Delaware also provides contraception which comprises approximately 31% of our care. These contraceptive services include oral contraceptives, Nuvaring, contraceptive patch, IUDs, implants, hormonal injections (Depo Provera), condoms, and emergency contraception kits. Planned Parenthood of Delaware is a premier provider of Long Acting Reversible Contraceptives (LARCS) in the state of Delaware. We also provide cancer screenings, which include Pap tests, HPV vaccines, breast exams, colposcopy, LEEP procedures, and endometrial biopsies. Additionally, we provided pregnancy tests, reproductive health visits for women and men, IUD removals, destruction of vaginal, vulval and penile lesions, and ablation with extensive cervical dysplasia.

The Centers for Disease Control (CDC) offers a wealth of information concerning STIs. Treatment guidelines change over time so confirming recommendations is recommended.

One of the important new services provided is PrEP (pre exposure prophylaxis). PrEP is a pill that when taken daily, helps prevent the spread of HIV, the virus that causes AIDS, and is prescribed for people who are at high risk for becoming infected with HIV. HIV/AIDS in Delaware remains a significant problem. There are 5883 diagnosed people living with HIV/AIDS in Delaware. The death rate from HIV is greater in Delaware than it is nationally (source: Delaware Division of Public Health). Planned Parenthood of Delaware is one of four PrEP prescriber locations in Delaware. PrEP is a drug for those at high risk of contracting HIV/AIDS. It is not a vaccine, but a pill that when taken daily, helps prevent the spread of HIV. How does it work? The drug that is used right now is called Truvada, which helps stop HIV from taking hold and spreading throughout the body.

A generic form will soon be on the market. It is prescribed for those at high risk for acquiring HIV, including those who sometimes have sex without using a condom, those whose sexual partner is at high risk for contracting HIV, those who have multiple sexual partners, those who have a sex partner that is an IV drug user, and those that have a sex partner who has HIV. It is not prescribed to those who are already HIV positive. Daily use of PrEP can lower the risk of contracting HIV through sexual intercourse by 90%. It can also lower the risk of contracting HIV through IV drug use by 70%. There are some medical assistance programs that cover the cost of PrEP for the uninsured, and it is now covered by Medicaid in Delaware. In the US, 50,000 persons contract HIV each year. The number of Americans living with HIV was at 1.2 million at the end of 2012. That number continues to rise. 12.8% of those who have HIV do not yet know they are infected. The Northeast region of the US has the highest rate of persons living with new HIV infections.

Planned Parenthood of Delaware offers comprehensive testing, treatment, counseling, and education for STIs. We also participate in the PrEP program and are able to prescribe the medication to persons at risk for HIV that significantly lowers an individual's risk for transmission of this disease. In 2015 alone, we provided over 10,000 STI tests which comprised 34% of our services. We serve the State of Delaware with three clinics located in Wilmington, Newark and Dover. Appointments can be made by calling 800-230-PLAN or online at www.ppdel.org. We accept most forms of insurance, Medicaid and Title X.

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