Sexually Transmitted Diseases

Anyone who is sexually active should be aware of sexually transmitted diseases (STD), also called venereal diseases or VD. All are highly contagious, and some can cause serious, even life-threatening, problems. None of them is harmless. Most occur in young people from adolescence to age 25. Except for the common cold and flu, they are the most common infectious diseases in the United States.

Sexually transmitted diseases are passed from one person to another through sexual intercourse or intimate contact involving the sex organs, the mouth, or the rectum. There are over 20 recognized types of STD. Some can be cured, some cannot. The most significant are gonorrhea and chlamydia - including the complication of pelvic inflammatory disease. Papillomavirus, a virus that causes genital warts, is one of the most common STD in the United States. Syphilis, which has plagued humanity for centuries, is still a health problem. Another sexually transmitted disease, genital herpes, is a more recent cause for concern. Because symptoms are often masked or misleading, STD are usually hard to diagnose in women. STD can cause very serious problems for women. Gonorrhea and chlamydia, for example, can cause pelvic inflammatory disease, chronic pain, infertility, ectopic pregnancy (pregnancy occurring outside of the uterus), and even death. STD can be very harmful to pregnant women. If not caught early, or if left untreated, STD can lead to miscarriages and premature births. Some types of STD can infect an unborn or newborn baby, sometimes resulting in the baby's permanent disability or death.

- **Gonorrhea**
- **Chlamydia**
- **Pelvic Inflammatory Disease**
- **Papillomavirus (Condylomas)**
- **Syphilis**
- **Herpes**

### Gonorrhea

Gonorrhea is the most often reported STD in the United States. Untreated, it can lead to pelvic inflammatory disease, infertility, and crippling arthritis.

Most women (about 80%) who get gonorrhea have no signs of the disease in its early stages. Those who do have symptoms develop them from about 2 days to 3 weeks after sexual contact with a person who has gonorrhea. There may be a vaginal discharge and a minor irritation that comes and goes. These symptoms can be mistaken for other problems, however. Although men can also get the disease and have no symptoms, they usually have a discharge from the penis and severe burning during urination.

**Diagnosis and Treatment**

Gonorrhea is not limited to the sex organs. It can also infect the mouth or throat through oral sex with an infected partner. The rectum can also be infected - indirectly, from either the vagina or cervix, or directly, from anal sex.

A fairly simple test can detect gonorrhea in women. It involves taking a sample of discharge from the cervix during a pelvic exam. The sample is then tested in a laboratory to see if the bacteria that cause gonorrhea are present.

Although gonorrhea can be serious if left untreated, it can be cured with antibiotics.

It is now known that certain types of gonorrhea cannot be treated with penicillin, an antibiotic usually used for gonorrhea. Either the bacteria are not affected by the drug, or they are able to actually destroy the drug. Fortunately, other drugs are effective. Treatment for gonorrhea can work only if all sexual partners are treated. Otherwise, there is a danger of reinfection.

### Effects on Pregnancy

A pregnant woman with gonorrhea can infect the fetus as it passes through the birth canal during delivery. A newborn's eyes are very sensitive to gonorrhea, and blindness may result. To help prevent this, the eyes of newborns are always treated with either a chemical (silver nitrate) or an antibiotic. This is done whether or not the mother or father has gonorrhea.

### Chlamydia

Chlamydial infections of the sex organs are more common than gonorrhea. Like gonorrhea, these infections are a frequent cause of pelvic inflammatory disease, infertility, and problems during pregnancy.
Chlamydia can coexist with gonorrhea. As with gonorrhea, most cases of chlamydial infection in women have few symptoms. When symptoms are present, they are like those described for gonorrhea. Men typically have a discharge from the penis and burning during urination.

**Diagnosis and Treatment**

The tests for chlamydia are complex but have recently become more available to doctors. At present, it is most often diagnosed on the basis of a history of sexual exposure and an exam. Because it is difficult to detect chlamydia with lab tests, doctors often treat patients for chlamydia when tests confirm that gonorrhea is present.

Chlamydial infections can be cured with antibiotics. Treatment usually requires taking medication several times a day for 10 days or more. Again, all exposed sexual partners should be fully treated at the same time or they will reinfect each other.

**Effects on Pregnancy**

In the United States, more pregnant women are infected with chlamydia than with gonorrhea. If the infection is in the cervix, it can be passed to newborns during a vaginal delivery. Exposed infants may develop chlamydial eye infections, pneumonia, or ear infections. When eye treatment is routinely given to newborns, the eyes are protected against both chlamydia and gonorrhea. However, chlamydia may still infect the lungs or ears. If a pregnant women who has chlamydia is not treated, she has an increased risk for an infection of her uterus after delivery, which could delay her recovery.

**Pelvic Inflammatory Disease**

If not promptly found and treated, the bacteria that cause gonorrhea, chlamydia, and other infections may spread to a woman's uterus and fallopian tubes, causing pelvic inflammatory disease. The fragile fallopian tubes, which carry eggs from the ovaries to the uterus, may be damaged or blocked when infected. Immediate symptoms often include severe abdominal pain, fever, and tenderness of the pelvic organs (uterus and ovaries). If tubal damage has occurred, long-term problems may result:

- Chronic pelvic pain
- Recurring bouts of pelvic inflammatory disease
- Infertility
- Ectopic pregnancy
- Areas of pus (abscesses) in the pelvis

If the tube is partially blocked by infection and scarring, the sperm may still be able to meet and fertilize the egg, but the fertilized egg may not be able to pass through the tube. The fertilized egg then grows in the tube instead of the uterus. When this happens, it is called an ectopic or tubal pregnancy.

Both abscesses and ectopic pregnancies can be life threatening to women. The blocked tubes may also mean a woman will not be able to have children. The chances of this happening increase with each bout of disease.

Pelvic inflammatory disease can usually be treated with antibiotics. Hospitalization may be required if the disease is severe. Surgery may even be needed. Since male sexual partners may also have gonorrhea or chlamydia, they should also be treated with antibiotics, even if they have no sign of the disease. Otherwise the woman risks getting reinfected after she has been treated.

**Papillomavirus (Condylomas)**

Papillomavirus is a virus that causes growths called condylomas or genital warts. It is one of the most common STD in the United States. Condylomas commonly accompany other STD such as gonorrhea. The virus is usually spread by direct contact with a wart from an infected person.

Condylomas are fleshy growths that appear singly or in clusters. They almost always break out in moist areas on or around the genitals (sex organs) and anus. Growths inside the genital organs are soft and red or pink. Outside growths are firm and dark. They are often no larger than the tip of a pencil, but they may combine to form large, cauliflower-like growths.

These genital warts usually appear 1 to 3 months after contact, but some go undetected until they cause discomfort. Lesions can become infected and cause mild irritation or itching. Small condylomas may cause rectal pain or pain during intercourse. Papillomavirus may have a serious complication - the presence of condylomas has been linked to cervical cancer - and women with histories of genital warts should have a Pap test done at least once a year.

**Diagnosis and Treatment**
Relatively little is known about the spread of genital warts. After you get genital warts, you have a greater chance of getting them again. Since the disease is transmitted sexually, the doctor may order tests to be sure syphilis and gonorrhea are not also present. Sexual partners should also be examined to find out if they have genital warts so that they may be treated.

Large condylomas are sometimes removed by surgery, but treatment usually consists of covering genital warts with a drug called podophyllin. This chemical burns off the condylomas, killing the virus by stopping its reproduction. There may be some degree of pain experienced 4 to 6 hours after the medication is applied. Several treatments may be needed to completely rid the area of warts. However, no specific treatment is available to prevent further episodes - the warts can come back, even after adequate treatment. If an external lesion does not go away with podophyllin treatment, it may be treated by a freezing technique using liquid nitrogen. If the warts persist, the doctor may do a biopsy to exclude the possibility of cancer.

**Effects on Pregnancy**

Warts caused by papillomavirus may become more prominent during pregnancy - the warts tend to grow in size, bleed, or become infected. In rare cases, growth may be so extensive as to block the birth canal. A cesarean delivery may be needed in such cases. There have also been reports of growths on the newborn's larynx, but no other adverse effects have been noted.

Podophyllin is not used to treat genital warts during pregnancy because it may harm the newborn. Treatment will be delayed until after the baby is born, or, if necessary, the warts may be removed surgically.

**Syphilis**

Syphilis remains a dangerous STD. If untreated, it often spreads throughout the body, possibly causing blindness, heart disease, nervous disorders, insanity, tumors, and death.

Syphilis is passed from an infectious sore called a chancre (pronounced SHAN-ker). It occurs when a sore on one person is exposed to the broken skin or mucous membranes of a sexual partner. The genitals, mouth, and anal canal are particularly prone to infection. The chancre usually appears about 3 weeks after a person is exposed to the disease. The sore usually appears where the organism entered the body.

Syphilis is very hard to detect in women. The sore may be internal, where it is not noticed. In most cases, the chancre is in the vagina. For most heterosexual men, the chancre appears on the penis, but it may be anywhere around the genital area.

The chancre may be present for 1 to 5 weeks. During this time, syphilis is easily passed from one person to another during sexual contact. Even without treatment, it will disappear without scarring. If untreated, a rash will follow. At this time, there may be some weakness, sluggishness, or slight fever. The rash and other symptoms will go away, but the disease remains in the body. This is called the latent period. There are no symptoms during this period, which may last indefinitely. Years later, the disease may return in full force. Serious effects may involve the heart, blood vessels, and nervous system.

**Diagnosis and Treatment**

In the early stages, when a chancre is present, syphilis may be diagnosed by examining the fluid from the sore. A blood test may or may not find the disease in the earliest stages. After the chancre has disappeared, the only sure method for diagnosing syphilis is a blood test.

Syphilis is treated with injections of penicillin. More than one injection may be needed, depending on how severe the infection is. If the disease is treated in time, it can be cured. Other drugs are available for those allergic to penicillin. A person exposed to syphilis can often avoid getting the disease at all if treatment can be provided before the signs of disease develop.

**Effects on Pregnancy**

Syphilis can be passed from a pregnant woman's bloodstream to the body of her fetus, sometimes causing miscarriage or stillbirth. If the infant lives, it may be born with syphilis.

Infants with congenital syphilis (disease existing before and at birth) may have problems involving the nervous system, skin, bones, liver, lungs or spleen. Yet many babies infected by their mothers will show no symptoms for several years. If not noted and treated, the disease can lead to blindness, brain damage, or other serious problems.

Once suspected, congenital syphilis is diagnosed by physical examination, direct testing of infected areas, and blood tests.

Treating an infected pregnant woman will halt further damage to her fetus, but will not reverse any harm already done. If treatment is completed during the first 3 to 4 months of pregnancy, it is very unlikely that
the infant will suffer any long-term damage. Treating an infected infant after birth will usually prevent further damage, but will probably not reverse any damage already done. To protect all mothers and babies, pregnant women should have a blood test for syphilis early in pregnancy. This test is often repeated late in pregnancy to ensure that the mother was not exposed to the disease during pregnancy.

**Herpes**

An alarming increase of genital herpes has occurred in the United States in recent years. It is caused by a virus that can be transmitted by intimate sexual contact involving the genitals, mouth, or rectum. The disease usually first appears as painful sores on or around the sex organs. Early in the course of infection, these sores are in the form of blisters that contain the virus. These blisters will soon break and wear away the skin, becoming more and more painful. There may be fever, enlarged lymph glands, and flu-like symptoms. The sores heal, but the disease is not gone. Repeat outbreaks often occur but tend to be less severe than the first attack. Various factors, including stress, seem to trigger recurrences, but the reasons for this are not known.

The disease is most contagious when sores are present. At these times, all contact with suspected herpes sores should be avoided - in other words, no sex. This also includes touching the sores, which can spread herpes from one part of the body to another or from one person to another.

**Diagnosis and Treatment**

The appearance of sores or blisters is cause to suspect genital herpes. Past sores are another clue. Genital herpes is diagnosed by direct examination and lab tests of tissue samples and blood.

Because herpes is caused by a virus, not bacteria, it cannot be treated with antibiotics. No cure exists for genital herpes, but a drug called acyclovir is helpful when used during outbreaks. This drug prevents the virus from multiplying when it is applied, as an ointment, to lesions during a first outbreak. Acyclovir can also be taken in pill form.

**Effects on Pregnancy**

Genital herpes may be linked with an increased risk of miscarriage, premature delivery and low-birthweight infants. If a pregnant woman has an active genital herpes infection at the time of delivery, the baby may become infected while passing through the birth canal. Herpes infection in a newborn infant is very serious and may cause illness or death. To prevent infection of an infected mother's baby when lesions are present, a cesarean birth may be necessary.

Pregnant women who have had genital herpes at any time in the past, or who have sexual partners with genital herpes, require close watching during pregnancy. It is possible for women whose herpes is not active to deliver a healthy baby through the vagina instead of requiring a cesarean birth.

**What to Do About STD**

If you have had sexual contact with someone who has an STD, or with whom you think may have an STD, even if you have no signs of the disease, seek medical care immediately. The risk to your health increases each day that you delay. Most STD can be cured with prompt medical treatment. Those that cannot be cured require special precautions. No matter what you may have heard or read, there are no home test or home remedies that work.

If you are found to have an STD, inform your sexual partner and urge him or her to also seek treatment, through either a private doctor, clinic, or health department. The laws in all states allow minors to receive treatment for STD without parental consent. After treatment, you should have a follow-up exam to make sure the disease is completely cured. You should not resume sexual intercourse until the STD has been eliminated. These are serious, often life-threatening, diseases that should never be taken lightly.

It is very important if you are pregnant and know or suspect that you have an STD, or if you have had an STD in the past, that you inform your doctor as early as possible. Your infant's health could be at stake. At the very least, your doctor will be alerted to possible complications for your baby. Ideally, the STD will be treated early, in order to lessen the risk that your baby will contract the disease.

Unlike some diseases, you cannot build up immunity to STD. You can get these diseases again and again if exposed. There are ways to protect yourself from exposure to STD, however. One is to limit sexual partners to those you know and trust - relationships in which each partner shares a concern for the other's welfare. An intact condom (rubber) worn by the male during intercourse provides some protection against catching or spreading STD. Contraceptive jellies and foams (those that contain a spermicide) also provide some
protection. Your best protection, though, is knowledge - knowing how to protect yourself against STD and what to do if you are exposed to an STD.

With STD, as with any health matter, you are best served by full and open communication with your doctor.