The American College of Obstetricians and Gynecologists

WOMEN'S HEALTH CARE PHYSICIANS

Gynecologic Problems • EP009

# How to Prevent Sexually Transmitted Infections

**S**exually transmitted infections (STIs) are infections that are spread by sexual contact. Except for colds and flu, STIs are the most common contagious (easily spread) infections in the United States, with millions of new cases each year. Although some STIs can be treated and cured, others cannot. Prevention is the key to fighting STIs. By knowing the facts, you can take steps to protect your health.

This pamphlet explains

- types and symptoms of STIs
- risks of getting an STI
- how to prevent STIs

## **Overview of Sexually Transmitted Infections**

Anyone who has sexual contact—vaginal, anal, or oral sex—with another person may get an STI. People with an STI may not have any symptoms and may not know they have it. Even if there are no symptoms, your health can be affected.

STIs can cause severe damage to your body—even death. A person with an STI can pass it to others by contact with skin, genitals, mouth, rectum, or body fluids.

Symptoms of an STI can range from vaginal discharge and mild irritation to severe pain. Often, symptoms occur only if the infection becomes more advanced. In most cases, the long-term health problems can be avoided by early treatment.

STIs are caused by bacterial or viral infections. STIs caused by bacteria are treated with *antibiotics*. Those caused by viruses cannot be cured, but symptoms can be treated

Anyone who is sexually active can be exposed to an STI. Even if there are no symptoms, tests can be done to diagnose infection.

# Gonorrhea and Chlamydia

Gonorrhea and chlamydia are caused by bacteria. These two infections often occur at the same time.

Gonorrhea and chlamydia often have no symptoms. When symptoms do occur, they may appear

2–21 days (3 weeks) after contact with an infected person. Symptoms may include:

- A discharge from a woman's vagina or a man's penis
- Painful or frequent urination
- Pain in the pelvis or abdomen
- Burning or itching in the vaginal area
- · Redness or swelling of the vulva
- Bleeding between periods
- Sore throat with or without fever
- · Swollen or enlarged lymph nodes

Untreated chlamydia or gonorrhea can cause *pelvic inflammatory disease (PID)* in women. PID is an infection of the uterus, fallopian tubes, and ovaries. It can cause *infertility*. Symptoms of PID are fever, nausea and vomiting, and pain in the abdomen. It can lead to long-term pelvic pain.

Gonorrhea and chlamydia are treated with antibiotics. If you have gonorrhea, you will likely receive treatment for chlamydia. Gonorrhea is treated with an antibiotic shot followed by antibiotic pills. If you cannot get the shot and are treated with just antibiotic pills, you should be tested after treatment to make sure it has worked. Chlamydia is treated with antibiotic pills. It is important to take all of your medicine. All of your sex partners within the last 60 days also must be treated. If your male partner cannot see his own health care professional, you may be able to get a prescription for him from your health care professional.

You can pass gonorrhea and chlamydia to your partner even while you are being treated. If you have either disease, avoid sexual contact until both you and your partner have finished treatment.

### **Human Papillomavirus**

Human papillomavirus (HPV) is one of the most common STIs in the United States. More than 150

### **STIs and Pregnancy**

Having an STI during pregnancy can harm the baby if it is passed to him or her.

- Gonorrhea and chlamydia both can cause health problems in the infant ranging from eye infections to pneumonia.
- Syphilis may cause miscarriage or stillbirth.
- *Human immunodeficiency virus (HIV)* infection can occur in a baby.

If you are pregnant and you or your partner have had—or may have—an STI, inform your doctor. Your baby may be at risk. Tests for some STIs are offered routinely during prenatal care. It is best to treat the STI early to lower the chances that your baby also will contract the disease. You and your partner both may have to be treated.

types of this virus have been identified. Some types are spread from person to person through sexual contact.

Like many STIs, there often are no signs of genital HPV. However, a few types of HPV cause warts. For women, these warts can appear on the vulva, vagina, cervix, and anus. For men, they can appear on the penis, scrotum, anus, or anywhere else in the genital area.

Sometimes warts go away on their own. If they do not, there are several treatments for warts available. However, over-the-counter wart medications should never be used on genital warts.

Even after the warts have cleared up, the virus may be present. The virus can remain in the body for weeks or years without any symptoms.

Some types of HPV are linked to cancer in both women and men. In some women, certain types of HPV can cause abnormal changes in the cervix that may lead to cancer. HPV also is linked to cancer of the anus, vulva, vagina, penis, head, and neck.

A vaccine is available that protects against the types of HPV that are the most common cause of cancer, precancer, and genital warts. However, the vaccine does not protect against all types of HPV. Adult women still need to follow screening guidelines for cervical cancer even if they were vaccinated.

The ideal age for HPV vaccination of girls and boys is age 11 years or 12 years, but it can be given starting at age 9 years and through age 26 years. For those age 9–14 years, two shots of vaccine are recommended. The second shot should be given 6–12 months after the first one. For those age 15 years through 26 years, three shots of vaccine are recommended.

### **Syphilis**

Syphilis is caused by a type of bacteria. If not treated, syphilis can infect many parts of the body, causing major health problems—even death.

Most people have no symptoms of syphilis. The first sign of syphilis may be a painless, smooth sore at the site of the infection. Syphilis is easily treated in this early stage. Other symptoms of syphilis are warts and a skin rash.

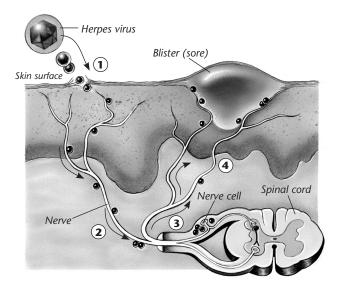
Syphilis is passed from person to person through direct contact with a syphilis sore. It also can be spread by touching the rash, warts, or infected blood during the second stage of infection. It enters the body through a sore or a cut in the skin or mucous membrane.

Sores often occur on the genitals or in the vagina, anus, or rectum. Sores also can occur on the lips and mouth.

Without treatment, the symptoms may go away, but the disease will remain. Years later, it can return in its most severe form and cause heart problems, neurologic problems, paralysis, and blindness.

# **Genital Herpes**

Millions of Americans carry the genital herpes virus. The most common symptom of herpes is a sore on or around the genitals. These sores appear as red spots, bumps, or blisters. They can last from a few days to a few weeks.



The herpes virus passes through your skin (1). It travels through your body (2) and settles at nerve cells near your spine (3). When something triggers a new bout of herpes, the virus leaves its resting place and travels along the nerve, back to the surface of the skin (4).

The symptoms go away by themselves, but the virus remains in your body. The sores may come back at any time, usually in the same place they first occurred. Treatment can help heal the sores, but it cannot kill the virus. Therefore, once you have herpes, it is possible to transmit the infection to others without knowing it.

If you or your partner have oral or genital herpes, avoid sex from the time of first symptoms until a few days after the scabs have gone away. Not having sex does not mean you cannot hug or cuddle. Just be sure that lesions and their secretions do not touch the other person's skin. Wash your hands with soap and water after any possible contact with lesions. This will keep you from reinfecting yourself or passing the virus to someone else.

### **Human Immunodeficiency Virus**

HIV is the virus that causes *acquired immuno-deficiency syndrome (AIDS)*. The rate of HIV infection is increasing most rapidly among women who have sex with men.

HIV enters the bloodstream by way of body fluids, usually blood or semen. Once in the blood, the virus invades and kills cells of the immune system—the body's natural defense against disease.

HIV weakens the immune system, which may lead to AIDS. With AIDS, a person's immune system is so weakened that other life-threatening conditions, such as infections or cancer, can occur. Although there is no cure for HIV, treatment may prevent or delay the onset of AIDS, which can be fatal.

# **Trichomonas**

Trichomonas vaginitis is an infection caused by a microscopic parasite that is spread through sex. It can

be cured with treatment. Many people have no symptoms of trichomonas. When symptoms do occur, they include discharge from the vagina and vaginal itching and redness.

# Hepatitis

Hepatitis is a serious infection of the liver caused by a virus. Two types of hepatitis, B and C, can be sexually transmitted. They can be spread by direct contact with the body fluids (blood, semen, vaginal fluids, and saliva) of an infected person. There is a vaccine available to prevent infection with hepatitis B. There is no vaccine to prevent hepatitis C infection.

Many people infected with hepatitis B or hepatitis C recover completely. However, some people develop chronic liver infections, which can lead to long-term health problems.

### **How to Protect Yourself From STIs**

The factors listed in the box increase the risk of an STI. Adolescents have a higher risk, and lifestyle factors also can play a role. There are many ways you can reduce your risk of getting an STI:

- Know your sexual partners and limit their number—Your partner's sexual history is as important as your own. The more partners you or your partners have, the higher your risk of getting an STI.
- Use a latex or polyurethane condom—Using a latex or polyurethane condom every time you have vaginal, oral, or anal sex decreases the chances of infection. Condoms lubricated with spermicides do not offer extra protection. Frequent use of some spermicides can increase the risk of HIV.
- Avoid risky sex practices—Sexual acts that tear or break the skin carry a higher risk of STIs. Even small cuts that do not bleed let germs pass back and forth. Anal sex poses a high risk because tissues in the rectum break easily. Body fluids also can carry STIs. Having any unprotected sexual contact with an infected person poses a high risk of getting an STI.
- Get immunized—Vaccinations are available that will help prevent hepatitis B and HPV.

### Are You at Risk?

You are at increased risk of getting an STI if you

- have or have had more than one sexual partner
- have a partner who has or has had more than one sexual partner
- have sex with someone who has an STI
- have a history of STIs
- use intravenous drugs (injected into a vein) or your partner uses intravenous drugs

### Finally...

Every woman should know how to protect herself and her partners from STIs. If you think you have an STI, seek medical treatment to avoid long-term health problems.

# Glossary

Acquired Immunodeficiency Syndrome (AIDS): A group of signs and symptoms, usually of severe infections, occurring in a person whose immune system has been damaged by infection with human immunodeficiency virus (HIV).

Antibiotics: Drugs that treat certain types of infections.

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

Human Papillomavirus (HPV): The name for a group of related viruses, some of which cause genital warts and some of which are linked to cervical changes and cancer of the cervix, vulva, vagina, penis, anus, mouth, and throat.

*Infertility:* A condition in which a couple has been unable to get pregnant after 12 months without the use of any form of birth control.

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

Trichomonas *Vaginitis:* A type of vaginal infection caused by a parasite that is passed through sex.

This Patient Education Pamphlet was developed by the American College of Obstetricians and Gynecologists. Designed as an aid to patients, it sets forth current information and opinions on subjects related to women's health. The average readability level of the series, based on the Fry formula, is grade 6–8. The Suitability Assessment of Materials (SAM) instrument rates the pamphlets as "superior." To ensure the information is current and accurate, the pamphlets are reviewed every 18 months. The information in this pamphlet 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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The American College of Obstetricians and Gynecologists 409 12th Street, SW PO Box 96920 Washington, DC 20090-6920