Obstetricians and Gynecologists

WOMEN'S HEALTH CARE PHYSICIANS

How to Prevent Sexually Transmitted Infections

Sexually transmitted infections (STIs) are infections that are spread by sexual contact. STIs are very common and easily spread. Some STIs can be treated and cured, but others cannot be cured. By knowing the facts, you can take steps to protect your health.

You Need to Know

- signs and symptoms of infections
- who is at highest risk of infection
- how to prevent infections

Overview of Sexually Transmitted Infections

Anyone who has sexual contact with another person is at risk of getting an STI. Some STIs cause symptoms and others do not. A person with an STI can pass it to others through contact with skin, *genitals*, mouth, *rectum*, or body fluids. This includes contact through vaginal sex, anal sex, or oral sex. Even if there are no symptoms, your health can be affected.

What are the symptoms of an STI?

Symptoms can range from vaginal discharge and mild irritation to severe pain. Often, symptoms occur only if the infection has gone on for a while. In most cases, long-term health problems can be avoided with early treatment.

What causes STIs?

STIs are caused by infections with *bacteria* or *viruses*. STIs caused by bacteria are treated with *antibiotics*. STIs caused by viruses cannot be cured, but symptoms can be treated. Even if there are no symptoms, tests can be done to diagnose infection. Testing will help you know if you have an STI so you can take steps to prevent passing it to others.

Who is at highest risk of STIs?

People are at high risk of getting STIs if they

- 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 their partner uses intravenous drugs

Gonorrhea and Chlamydia

Gonorrhea and chlamydia are caused by bacteria. These infections often have no symptoms but still can have long-term effects on fertility. When symptoms occur, they may appear 2 to 21 days after contact with an infected person. These infections can occur at the same time.

What are the symptoms of gonorrhea and chlamydia?

- Discharge from the vagina or penis
- Painful urination or the need to go more often
- Pain in the *pelvis* or abdomen
- · Burning or itching in the vaginal area
- Redness or swelling of the vulva
- Bleeding between menstrual periods
- Sore throat with or without fever
- Swollen or enlarged lymph nodes

What is the treatment for gonorrhea and chlamydia?

Gonorrhea typically is treated with an antibiotic shot followed by antibiotic pills. Doctors often recommend follow-up testing to make sure the infection is gone. Chlamydia is treated with antibiotic pills.

Should my partner be treated?

All of your sex partners within the last 60 days should be treated. If your partner cannot see their own health care professional, you may be able to get a prescription for your partner from your health care professional.

Why is treatment for gonorrhea and chlamydia important?

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

Human Papillomavirus

Human papillomavirus (HPV) is one of the most common STIs in the United States. Some HPV types are spread through sexual contact. 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.

What are the symptoms of HPV infection?

HPV infection generally has no symptoms. But a few types of HPV can cause genital warts. Warts can appear anywhere in the genital area.

What is the treatment for HPV warts?

Sometimes warts go away on their own. If they do not, there are treatments available. Even after the warts have cleared up, HPV can remain in the body for weeks or years without symptoms.

Can HPV infection be prevented?

A vaccine is available that can significantly reduce the risk of getting cancer, precancer, and genital warts caused by HPV infection. The vaccine is safe and effective but does not protect against all types of HPV. This means that women should follow cervical cancer screening guidelines even if they were vaccinated.

How is the vaccine given?

The HPV vaccine is given as a series of shots. The ideal age for HPV vaccination of girls and boys is 11 or 12, but it can be given starting at age 9 and through age 26. If you are older than 26. have not been vaccinated, and are at risk of a new HPV infection, you and your health care professional can talk about whether you need the HPV vaccine. The vaccine is approved for people through age 45.

Syphilis

Syphilis is caused by bacteria. The bacteria that cause syphilis enter the body through a cut in the skin or through contact with a partner's syphilis sore. Because this sore commonly occurs on the vulva, vagina, anus, or penis, syphilis most often is spread through sexual contact. If not treated, syphilis can cause long-term health problems.

What are the symptoms of syphilis?

Symptoms of syphilis differ by stage:

- Primary stage—Syphilis first appears as a painless sore. This sore goes away without treatment in 3 to 6 weeks.
- Secondary stage—If syphilis is not treated, the next stage begins as the sore is healing or several weeks after the sore has disappeared. Symptoms at this stage may include rash on the soles of the feet and palms of the hands, flat warts on the vulva, and flu-like symptoms.
- Latent infection—In some people, the rash and other symptoms may go away in a few weeks or months but the infection is still in the body. This is called latent infection.

How is syphilis treated?

Syphilis is treated with antibiotics. The length of treatment depends on how long you have had the infection. You may have blood tests over time to see if the treatment is working. Avoid sexual contact during treatment. If you are diagnosed with syphilis, you also should be tested for HIV. Your sex partners should be treated for syphilis too.

Why is treatment for syphilis important?

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

Genital Herpes

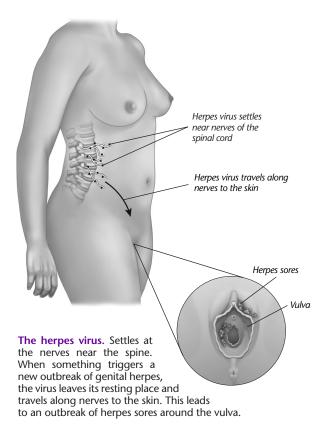
At least 50 million people in the United States—about 1 in 6 adults—are infected with the virus that causes genital herpes. Herpes infection can cause painful sores, but sometimes there are no sores. It is possible to have herpes and not know it.

What are the symptoms of herpes?

When first infected, a person with herpes may have flu-like symptoms. Sores may appear as small, fluid-filled blisters on the genitals, buttocks, or other areas. The sores often are grouped in clusters, and the area where the sores appear may be swollen and tender. When a person has symptoms, they appear about 2 to 10 days after the virus enters the body.

What happens to the herpes virus in the body?

After a person is first infected, the virus travels to nerve cells near the spine and stays there. When there is a trigger the virus can become active again. Triggers can include illness, stress, and hormonal changes. When the virus is active again, it travels along the nerves, back to where it first entered the body, and causes a new outbreak of sores and blisters. This is called a recurrence. The virus can be passed to others during a recurrence.



How to Protect Yourself From STIs

There are many ways you can reduce your risk of getting an STI:

- Know your sexual partners—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 reduces the risk of infection.
- Know that some sex practices increase the risk—Sexual acts that tear or break the skin carry a higher risk of STIs. 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 vaccines—Vaccines are available to help protect against hepatitis B and HPV.

What is the treatment for genital herpes?

There is no cure for herpes, but the infection can be managed. Antiviral medications taken during outbreaks can make them shorter and less severe. When taken on a daily basis, antiviral medications can reduce the number of outbreaks. This is called suppressive therapy. In some cases, suppressive therapy can prevent outbreaks for a long time. This therapy also reduces the risk of giving herpes to someone else.

Human Immunodeficiency Virus

Human immunodeficiency virus (HIV) is the virus that causes acquired immunodeficiency syndrome (AIDS). HIV is passed from person to person through contact with infected body fluids, such as semen, vaginal fluid, or blood. Once HIV is in your body, it attacks the immune system. As the immune system weakens, it is less able to resist disease and infections. AIDS is diagnosed when a person with HIV develops diseases that the immune system normally would fight off, such as pneumonia, certain types of cancer, and infections.

What are the symptoms of HIV infection?

Some people may have flu-like symptoms within 2 to 4 weeks of getting the virus. But other people may not feel sick until the infection is more serious. The only way to know if you have HIV is to get tested.

What is the treatment for HIV?

There is no cure for HIV infection, but it can be treated. Drugs are available that can help people with HIV stay healthy for a long time. The earlier treatment is started, the better for your long-term health. Early treatment also reduces your risk of giving the virus to your sex partners.

Trichomoniasis

Trichomoniasis 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 trichomoniasis. 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 blood, semen, vaginal fluids, and saliva of an infected person. There is a vaccine 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.

Your Takeaways

- 1. Sexually transmitted infections are very common and easily spread.
- 2. Some STIs can be treated and cured, but others cannot be cured.
- 3. Knowing the risk factors can help you protect yourself from STIs.
- 4. See your health care professional for testing and treatment if you have signs of an STI.

Terms You Should Know

Acquired Immunodeficiency Syndrome (AIDS): A group of signs and symptoms, usually of severe infections, in a person who has human immunodeficiency virus (HIV).

Antibiotics: Drugs that treat certain types of infections.

Anus: The opening of the digestive tract through which bowel movements leave the body.

Bacteria: One-celled organisms that can cause infections in the human body.

Cervix: The lower, narrow end of the uterus at the top of the vagina.

Fallopian Tubes: Tubes through which an egg travels from the ovary to the uterus.

Genitals: The sexual or reproductive organs.

Hepatitis: Infection of the liver that can be caused by several types of viruses.

Human Immunodeficiency Virus (HIV): A virus that attacks certain cells of the body's immune system. If left untreated, HIV can cause 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 cancer of the cervix, vulva, vagina, penis, anus, mouth, and throat.

Immune System: The body's natural defense system against viruses and bacteria that cause disease.

Infertility: The inability to get pregnant after 1 year of having regular sexual intercourse without the use of birth control.

Lymph Nodes: Small groups of special tissue that carry lymph, a liquid that bathes body cells. Lymph nodes are connected to each other by lymph vessels. Together, these make up the lymphatic system.

Menstrual Periods: The monthly shedding of blood and tissue from the uterus.

Ovaries: Organs in women that contain the eggs necessary to get pregnant and make important hormones, such as estrogen, progesterone, and testosterone.

Pelvic Inflammatory Disease (PID): An infection of the upper female genital tract.

Pelvis: The lower portion of the trunk of the body.

Penis: The male sex organ.

Pneumonia: An infection of the lungs.

Rectum: The last part of the digestive tract.

Semen: The fluid made by male sex glands that contains sperm.

Trichomoniasis: A type of vaginal infection caused by a parasite. This infection is passed through sex.

Uterus: A muscular organ in the female pelvis. During pregnancy, this organ holds and nourishes the fetus. Also called the womb.

Vagina: A tube-like structure surrounded by muscles. The vagina leads from the uterus to the outside of the body.

Viruses: Agents that cause certain types of infections.

Vulva: The external female genital area.

This information is designed as an educational aid to patients and sets forth current information and opinions related to women's health. It is not intended as a statement of the standard of care, nor does it comprise all proper treatments or methods of care. It is not a substitute for a treating clinician's independent professional judgment. For ACOG's complete disclaimer, visit www.acog.org/WomensHealth-Disclaimer. Copyright August 2020 by the American College of Obstetricians and Gynecologists. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, posted on the internet, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without prior written permission from the publisher. This is EP009 in ACOG's Patient Education Pamphlet Series. ISSN 1074-8601 American College of Obstetricians and Gynecologists 409 12th Street SW Washington, DC 20024-2188