

# Gonorrhea

## **What is gonorrhea?**

Gonorrhea is a common sexually transmitted disease (STD).

## **What causes gonorrhea?**

Gonorrhea is caused by *Neisseria gonorrhoeae*, a bacterium that can grow and multiply easily in mucous membranes of the body. Gonorrhea bacteria can grow in the warm, moist areas of the reproductive tract, including the cervix (opening to the womb), uterus (womb), and fallopian tubes (egg canals) in women, and in the urethra (urine canal) in women and men. The bacteria can also grow in the mouth, throat, and anus.

## **How do people get gonorrhea?**

Gonorrhea is spread through sexual contact (vaginal, oral, or anal). This includes penis-to-vagina, penis-to-mouth, penis-to-anus, mouth-to-vagina, and mouth-to-anus contact.

Ejaculation does not have to occur for gonorrhea to be transmitted or acquired. Gonorrhea can also be spread from mother to child during birth.

Gonorrhea infection can spread to other unlikely parts of the body. For example, a person can get an eye infection after touching infected genitals and then the eyes. Individuals who have had gonorrhea and received treatment may get infected again if they have sexual contact with persons infected with gonorrhea.

## **How common is gonorrhea?**

Gonorrhea is a very common infectious disease. Each year approximately 650,000 people in the United States are infected with gonorrhea. In 1999, the rate of reported gonorrhea infections was 132.2 per 100,000 persons. This reflects an increase of 1.2% compared to the rate in 1998 and an increase of 9.2% compared with 1997.

## **What are the signs and symptoms of gonorrhea?**

When initially infected, the majority of men have some signs or symptoms. Symptoms and signs include a burning sensation when urinating and a yellowish white discharge from the penis. Sometimes men with gonorrhea get painful or swollen testicles.

In women, the early symptoms of gonorrhea are often mild, and many women who are infected have no symptoms of infection. 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 and a vaginal discharge that is yellow or occasionally bloody. Women with no or mild gonorrhea symptoms are still at risk of developing serious complications from the infection. Untreated gonorrhea in women can develop into pelvic inflammatory disease (PID). Please see below for more about the complications of gonorrhea.

Symptoms of rectal infection include discharge, anal itching, soreness, bleeding, and sometimes painful bowel movements. Infections in the throat cause few symptoms.

## **When do symptoms appear?**

In males, symptoms usually appear 2 to 5 days after infection, but it can take as long as 30 days for symptoms to begin. Regardless of symptoms, once a person is infected with gonorrhea, he or she can spread the infection to others if condoms or other protective barriers are not used during sex.

## **How is gonorrhea diagnosed?**

Several laboratory tests are available to diagnose gonorrhea. A health care provider can obtain a sample of fluid from the infected mucus membrane (cervix, urethra, rectum, or throat) and send the specimen to a laboratory for analysis. Gonorrhea that is present in the male or female genital tract can be diagnosed in a laboratory by using a urine specimen from an infected person. A quick laboratory test for gonorrhea that can be done in the clinic or doctor's office is a Gram stain. The Gram stain allows the doctor to see the gonorrhea bacteria under a microscope. This test works better for men than for women.

## **Who is at risk for gonorrhea?**

Any sexually active person can be infected with gonorrhea. In the United States, approximately 75% of all reported gonorrhea is found in younger persons aged 15 to 29 years. The highest rates of infection are usually found in 15- to 19-year-old women and 20- to 24-year-old men. In 1999, 77% of the total number of cases of gonorrhea reported to the CDC occurred among African Americans.

### **What is the treatment for gonorrhea?**

Many of the currently used antibiotics can successfully cure gonorrhea in adolescents and adults. Penicillin is a common antibiotic that is no longer used to treat gonorrhea, because many strains of the gonorrhea bacterium have become resistant to penicillin. Because many people with gonorrhea also have chlamydia, antibiotics for both infections are usually given together. Persons with gonorrhea should also be screened for other STDs.

It is important to take all of the medication prescribed to cure gonorrhea, even if the symptoms or signs stop before all the medication is gone. Although medication will stop the infection, it will not repair any permanent damage done by the disease. Persons who have had gonorrhea and have been treated can also get the disease again if they have sexual contact with an infected person.

### **What are the complications of gonorrhea?**

Untreated gonorrhea can cause serious and permanent problems in both women and men. In women, gonorrhea is a common cause of pelvic inflammatory disease (PID). About 1 million women each year in the United States develop PID. Women with PID do not necessarily have symptoms or signs. When symptoms or signs are present, they can be very severe and can include strong abdominal pain and fever. PID can lead to internal abscesses (pus pockets that are hard to cure), long-lasting pelvic pain, and infertility. PID can cause infertility or damage the fallopian tubes (egg canals) enough to increase the risk of ectopic pregnancy. Ectopic pregnancy is a life-threatening condition in which a fertilized egg grows outside the uterus, usually in a fallopian tube.

In men, gonorrhea can cause epididymitis, a painful condition of the testicles that can sometimes lead to infertility if left untreated. Without prompt treatment, gonorrhea can also affect the prostate and can lead to scarring inside the urethra, making urination difficult. Gonorrhea can spread to the blood or joints. This condition can be life-threatening. Also, persons with gonorrhea can more easily contract HIV, the virus that causes AIDS. Persons with HIV infection and gonorrhea are more likely than persons with HIV infection alone to transmit HIV to someone else.

### **How does gonorrhea affect a pregnant woman and her baby?**

If a pregnant woman has gonorrhea, she may give the infection to her infant as the baby passes through the birth canal during delivery. This can cause blindness, joint infection, or a life-threatening blood infection in the baby. Treatment of gonorrhea as soon as it is detected in pregnant women will lessen the risk of these complications. Pregnant women should consult a health care provider for appropriate medications.

### **How can gonorrhea be prevented?**

Use latex condoms correctly every time you have sex.

Persons who choose to engage in sexual behaviors that can place them at risk for STDs should use latex condoms every time they have sex. A condom put on the penis before starting sex and worn until the penis is withdrawn can help protect both the male and the female partner from gonorrhea. When a male condom cannot be used appropriately, sex partners should consider using a female condom.

Condoms do not provide complete protection from all STDs. Sores and lesions of other STDs on infected men and women may be present in areas not covered by the condom, resulting in transmission of infection to another person.

Limit the number of sex partners, and do not go back and forth between partners.

Practice sexual abstinence, or limit sexual contact to one uninfected partner.

If you think you are infected, avoid sexual contact and see a health care provider immediately.

Any genital symptoms such as discharge or burning during urination or unusual sore or rash should be a signal to stop having sex and to consult a health care provider immediately. If you are told you have gonorrhea or any other STD and receive treatment, you should notify all of your recent sex partners so that they can see a health care provider and be treated. This will reduce the risk that your partners will develop serious complications from gonorrhea and will reduce your own risk of becoming reinfected.

### **References**

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