GONORRHEA

WHAT IS IT?
Gonorrhea is a sexually transmitted infection (STI) caused by the bacterium Neisseria gonorrhoeae.

HOW COMMON IS IT?
Gonorrhea is the second most commonly reported bacterial STI in the United States.
- In 2010, 309,341 cases were reported to the Centers for Disease Control and Prevention.
- Gonorrhea occurs most frequently in young sexually active people ages 15 to 24.

HOW IS IT TRANSMITTED?
- Gonorrhea is spread through vaginal, anal, and oral sex. Ejaculation does not have to occur for gonorrhea to be transmitted or acquired.
- Conjunctivitis (an infection of the eye) can occur when the infected discharge is transmitted to the eye during sex or hand-to-eye contact.
- Gonorrhea can also be passed from a mother to her child during vaginal delivery. This can lead to blindness, joint infection, or a life-threatening blood infection in the newborn.

WHAT ARE THE SYMPTOMS?
Gonorrhea can occur without symptoms. Men develop symptoms more often than women. If symptoms do develop, they usually present within 2-10 days following sexual contact. However, it can take as long as 30 days for symptoms to appear.
- Women usually have mild symptoms, if they develop any at all. These include an abnormal vaginal discharge, burning with urination, and vaginal bleeding between periods.
- Men can experience thick penile discharge, burning with urination, painful irritation around the opening of the penis, and/or swollen testicles.
- Both men and women can develop rectal pain and/or bloody discharge from the rectum if they have had anal sex with an infected partner. Transmission from oral sex can cause painful throat infections.

WHAT ARE THE COMPLICATIONS?
- If left untreated in women, gonorrhea can spread to the uterus and fallopian tubes causing a condition known as pelvic inflammatory disease (PID). Symptoms include abdominal pain/cramps, bleeding between periods, vomiting, and fever. PID can cause permanent damage to the uterus and fallopian tubes, leading to chronic pelvic pain, infertility, and potentially fatal ectopic pregnancies (pregnancies in the fallopian tube instead of the uterus). PID affects over one million women per year in the US and results in infertility in about 10% of cases.
- If left untreated in men, gonorrhea can cause epididymitis, an infection of the tube that transports sperm from the testis to the penis. Other complications include fertility problems, prostate inflammation, and scarring in the urethra (the urinary canal).
- Without treatment, gonorrhea can also spread through the blood and infect the heart valves, brain, or joints. This can be a life-threatening condition.
- Men and women with gonorrhea are also at increased risk for HIV infections.

HOW IS IT DIAGNOSED?
- In women, a sample of discharge is obtained from the cervix and sent to the lab for testing.
- In men, a urine specimen is sent to the lab. For accurate testing, it is important for males not to urinate for at least one hour prior to giving a urine sample.
- Because gonorrhea can infect the rectum and throat, inform your healthcare provider if you have had anal or oral sex so that appropriate testing can be done.
- Since gonorrhea and chlamydia often occur simultaneously, samples sent to the lab are usually tested for both organisms.
**HOW IS IT TREATED?**
Gonorrhea is effectively treated and cured with antibiotics. It is usually treated with an intramuscular injection of an antibiotic called Ceftriaxone:
- You will be monitored for 30 minutes after the injection for any symptoms of an allergic reaction.
- If you have a previous allergy to this class of antibiotics or penicillin, a different medication will be prescribed.

Because patients infected with gonorrhea are frequently co-infected with chlamydia, the CDC recommends routine treatment for chlamydia in all patients diagnosed with gonorrhea.

If symptoms do not resolve within one week of starting treatment, contact your healthcare provider.

**DO I NEED TESTING AFTER TREATMENT?**
- A test of cure three to four weeks after completing treatment is recommended only for patients with persistent symptoms and pregnant females.
- The CDC recommends rescreening for infection in all patients approximately three months after treatment is completed.

**WHAT ABOUT MY PARTNER(S)?**
- All sexual partners who have had sexual contact with you within the last 60 days should be examined and treated even if they have no symptoms.
- If your last sexual contact was more than 60 days ago, your most recent sexual partner should still be evaluated and treated.
- Do NOT have sexual contact for at least seven days after you and your partner(s) have completed treatment.

**HOW IS IT PREVENTED?**
Guidelines for preventing gonorrhea are the same as for preventing other STIs:
- **Know your partner.** Avoid sex with casual partners or strangers. Ask your partner about his or her sexual history before becoming intimate, and be prepared to share your history as well.
- **Limit your number of partners.** Your risk of getting an infection increases as your number of partners increases.
- **Use latex barriers (eg, condoms, dental dams, finger cots) consistently.** Using these barriers from the beginning to the end of skin contact offers the best protection. Substitute a polyurethane condom if either you or your partner is sensitive to latex. Remember that the birth control pill, contraceptive ring, Depo shot, and other forms of hormonal contraception provide no protection against gonorrhea and other STIs.
- **Get regular STI screens.** Sexually active men and women (especially those 25-30 years of age or younger) should have annual STI screens. Individuals practicing risky sexual behavior and all pregnant women should also be screened.

**RECOMMENDED WEBSITES:**
- www.niaid.nih.gov
- www.cdc.gov/std/

*If you develop any of the symptoms discussed in this handout or suspect that you have been exposed to gonorrhea, you should see your healthcare provider immediately. Early diagnosis and treatment are necessary to prevent complications and the spread of infection.*
The person giving you this notification has been treated for GONORRHEA.

1. Even if you do not have any signs or symptoms, you need to be examined and treated.

2. You should see your healthcare provider or go to the public health department at once.

3. When you go, show this card to your healthcare provider so that you can be properly tested and treated.

Dear Healthcare Provider:

The person presenting this notification has been told that he/she has been exposed to gonorrhea.

The Center for Disease Control recommends the following for the treatment of gonorrhea:

**Preferred Regimen:**
Ceftriaxone 250mg IM in a single dose
PLUS: Azithromycin 1 gram orally in a single dose or
Doxycycline 100mg orally twice a day for 7 days

**Alternate Regimens:**
- If Ceftriaxone is not available:
  Cefixime 400mg orally in a single dose
  PLUS azithromycin or doxycycline as above
  PLUS test-of-cure in 1 week

- If patient has a severe cephalosporin allergy:
  Azithromycin 2 grams orally in a single dose
  PLUS test-of-cure in 1 week

If you have any questions, please call VCU Student Health Services at the numbers listed above or your local health department.

Thank you for your cooperation.