July 2023

Gonorrhea

Surveillance Protocol

Provider Responsibilities

1. Report all gonorrhea cases to the West Virginia Department of Health and Human Resources, Bureau for Public Health (BPH) within seven days by submitting a completed VD-91 treatment card and corresponding lab and clinical information electronically, or by fax, to the STD Surveillance Unit (contact information printed at the bottom of VD-91 form).
2. Evaluate and test patients who present with signs and symptoms.
3. Evaluate and test patients who present as a contact to an infected person.
   a. Prophylactically treat based on clinical judgment.
4. Conduct appropriate screening of pregnant females.
5. Treat patients with a positive laboratory test according to the most current Centers for Disease Control and Prevention (CDC) treatment guidelines: www.cdc.gov/std/treatment/default.htm.
6. Offer Expedited Partner Therapy (EPT) to the patient so they can treat their partner(s) according to the most current CDC guidelines: www.cdc.gov/std/ept/default.htm.
7. Obtain sexual history for each patient requesting STD services according to the most current CDC guidelines: www.cdc.gov/std/treatment/sexualhistory.htm.
   a. Consider Extragenital Testing (EGT) for patients who report anal and oral sex.
   b. Contact the Office of Laboratory Services (OLS) for more information on EGT at 304-558-3530 (dhhr.wv.gov/ols/Pages/default.aspx).
8. Report suspected cephalosporin treatment failure to the state health department within 24 hours. Symptoms that persist 3-5 days after adequate treatment should be evaluated by culture and antimicrobial susceptibility.
9. Refer to the District Public Health Investigator, commonly referred to as a Disease Intervention Specialist (DIS), when assistance is needed to contact patients and/or partners.
10. Contact the STD Surveillance Unit with questions or concerns regarding reporting at 304-558-2195 or wvstd@wv.gov.

Laboratory Responsibilities

1. Report all positive gonorrhea lab results to BPH via electronic lab reporting (ELR) or by faxing a copy of the laboratory result to the STD Surveillance Unit at 304-558-6478.
2. Contact the STD Surveillance Unit with questions or concerns regarding reporting at 304-558-2195 or wvstd@wv.gov.

Local Health Responsibilities

1. Education and Outreach
   a. Educate providers about the importance of screening pregnant women and young adults for gonorrhea.
   b. Educate the public about gonorrhea signs and symptoms and risk factors.

Division of STD, HIV, Hepatitis, and Tuberculosis
350 Capitol Street, Room 125, Charleston, WV 25301-3715
Phone: 304-558-2195 - Fax: 304-558-4744
oeps.wv.gov/aboutus/Pages/about_dsh.aspx

c. Collaborate with state program staff to organize outreach and education events in high-impact areas/settings.

2. STD Testing and Treatment
   a. Follow and promote all testing and treatment guidelines recommended by the CDC: www.cdc.gov/std/gonorrhea/default.
   b. Offer EPT to patients that are willing to give treatment to their partners.
   c. Collect a sexual history for each patient in the STD Clinic and consider offering EGT (when applicable) based on findings.
3. Collaborate with BPH
   a. Prioritize patients/partners that DIS refer to the LHD for STD clinic appointments.
   b. Offer preventative treatment to patients that have been exposed to a known case after collecting laboratory samples.
   c. Promote BPH reporting requirements among providers.
   d. Refer providers to STD Surveillance or DIS staff for STD information when necessary.
   e. Contact STD Surveillance Unit for a patient's test or treatment history, if needed.
   f. Contact OLS with laboratory-specific questions at 304-558-3530, please visit website at: dhhr.wv.gov/ols/Pages/default.aspx.

DIS Responsibilities

1. Prioritize STD cases/investigations based on the DIS Field Follow-Up Reactor Grid.
2. Contact the patient and encourage them to seek treatment (refer to LHD when necessary).
3. Educate the patient and answer any questions they may have pertaining to STDs and partner services.
4. Interview the patient for all partners/contacts during the 60 days prior to diagnosis.
5. Provide partner notification to named contacts, if needed.
6. Refer partners to LHD for testing and/or treatment.
7. Complete required fields in case and partner(s) investigations in the West Virginia Electronic Disease Surveillance System (WVEDSS) and submit to the DIS Supervisor.
8. A case may be considered lost to follow-up (LTFU) two weeks after the case was identified and after the DIS has documented at least:
   a. Two phone call attempts
   b. One letter
   c. One field visit

BPH Responsibilities

1. Initiate prompt and complete reporting of gonorrhea cases to the CDC via WVEDSS.
2. Contact ordering providers on cases that require further surveillance follow-up to ensure adequate reporting of CDC core variables.

Division of STD, HIV, Hepatitis, and Tuberculosis
350 Capitol Street, Room 125, Charleston, WV 25301-3715
Phone: 304-558-2195 - Fax: 304-558-4744
oeps.wv.gov/aboutus/Pages/about_dsh.aspx

3. Assign appropriate cases/investigations to DIS for field follow-up, when necessary.
4. Provide technical expertise and consultation regarding surveillance, investigation, control measures, and prevention of gonorrhea.
5. Notify the CDC of suspected outbreaks identified in West Virginia and assist LHDs in obtaining the knowledge and resources necessary for investigations of a gonorrhea outbreak.
6. Notify the CDC of suspected gonorrhea cephalosporin treatment failure or any *N. gonorrhoeae* specimen with decreased cephalosporin susceptibility.
7. Summarize surveillance data for gonorrhea on an annual basis.
8. Offer laboratory testing of gonorrhea through OLS at no cost for patients and their partners.
9. Collaborate with CDC's Antimicrobial Resistant (AR) Lab Network to offer antimicrobial susceptibility testing (AST) at no cost to assist in care of patients with potentially drug-resistant gonorrhea infections.
10. Maintain Interstate Communications Control Records (ICCR) process for exchanging case and partner information with other states and jurisdictions.

Disease Control Objectives

1. Identify and respond to outbreaks of gonorrhea in a timely fashion so that appropriate control measures can be applied.
2. Offer partner services and EPT to all known gonorrhea cases in an effort to reduce the spread of infection.

Disease Prevention Objectives

1. Reduce the incidence of gonorrhea through education and outreach.
2. Adequately treat all patients and contacts according to the current CDC recommendations.
3. Obtain identifying and locating information about all partners/contacts and ensure confidential notification.

Disease Surveillance Objectives

1. Determine the incidence of gonorrhea in West Virginia.
2. Detect outbreaks of gonorrhea in West Virginia.

Public Health Significance

Gonorrhea is the second most commonly reported bacterial STD nationwide. In West Virginia, about 1,500 cases are reported each year. As with chlamydia, the majority of cases are among the age group of 20-25 years (about 30%). Most cases occur among Non-Hispanic Whites (about 55%), but Non-Hispanic Blacks generally have the highest rate of disease. Unlike chlamydia, the prevalence of reported gonorrhea among males and females is usually an even split, which is believed to be due to men reporting more signs and symptoms of infection.

Division of STD, HIV, Hepatitis, and Tuberculosis
350 Capitol Street, Room 125, Charleston, WV 25301-3715
Phone: 304-558-2195 - Fax: 304-558-4744
oeps.wv.gov/aboutus/Pages/about_dsh.aspx

July 2023

Gonorrhea

Surveillance Protocol

WEST VIRGINIA Department of Health & Human Resources
BUREAU FOR PUBLIC HEALTH

Clinical Description

The majority of genital gonococcal infections among men produce symptoms (purulent urethral discharge, often accompanied by dysuria) that cause them to seek curative treatment soon enough to prevent serious sequelae, but treatment might not be soon enough to prevent transmission to others. Men may have dysuria and mucoid-to-purulent discharge and, less commonly, pain and swelling in one or both testicles.

Among women, genital gonococcal infections might not produce recognizable symptoms until complications, such as pelvic inflammatory disease (PID), have occurred. PID can result in tubal scarring that can lead to infertility or ectopic pregnancy. Symptomatic women may have vaginal bleeding between menses, dysuria, and/or abdominal pain (sometimes with fever and nausea). Women may also have mucopurulent endocervical exudates.

The following may be noted in patients with gonococcal infection:

1. Asymptomatic
2. Vaginal or urethral discharge
3. Abnormal vaginal bleeding (postcoital or unrelated to menses)
4. Dyspareunia
5. Proctitis, rectal discharge or bleeding, anal itching (in cases of receptive anal intercourse)
6. Pain and swelling in one or both testicles (epididymitis)

Rarely, untreated gonorrhea can spread to your blood or joints, known as Disseminated Gonococcal Infection (DGI), which can be life-threatening.

Etiologic Agent

Gonorrhea is a bacterial infection caused by *Neisseria gonorrhoeae.*

Reservoir

Humans are the only known host.

Mode of Transmission

Anyone who has sex can get gonorrhea through unprotected vaginal, anal, or oral sex. However, sexually active young people are at a higher risk of getting gonorrhea. This is due to behaviors and biological factors common among young people. Gay, bisexual, and other men who have sex with men (MSM) are also at risk since gonorrhea can be spread through oral and anal sex. Miscarriage rates and premature delivery increase in women with gonorrhea and the infection can be passed on to an unborn child and cause serious complications. Babies born to infected

mothers may suffer from respiratory infection, conjunctivitis, or an inflammation of membranes in the eye that may lead to blindness.

Incubation Period

The time between exposure to gonorrhea and onset of symptoms is usually 3 to 30 days. If symptoms appear, it is most commonly within 3-10 days after sexual contact with an infected person.

Period of Communicability

All persons who are positive for gonorrhea are potentially infectious.

Case Definition

Laboratory Criteria for Diagnosis

a. Confirmatory laboratory evidence:
    i. isolation of *N. gonorrhoeae* by culture of a clinical specimen, minimally with isolation of typical gram-negative, oxidase-positive diplococci, **OR**
    ii. detection of *N. gonorrhoeae* by nucleic acid amplification (e.g., Polymerase Chain Reaction [PCR]) or hybridization with nucleic acid probe in a clinical specimen.
b. Presumptive laboratory evidence: observation of gram-negative intracellular diplococci in a urethral or endocervical smear.

To distinguish from an existing case, a new case must meet the following criteria:

a. No evidence of prior *N. gonorrhoeae* infection that has been reported as a case, **OR**
b. Evidence of prior *N. gonorrhoeae* infection that has been reported as a case, but the prior infection's specimen collection date or treatment date was greater than 30 days before the current infection's specimen collection date, **OR**
c. Evidence of prior *N. gonorrhoeae* infection that has been reported as a case, with a treatment date less than or equal to 30 days from the current infection's specimen collection date, and there is evidence of re-infection (re-exposure).

Case Classification

Confirmed: A case that meets confirmatory laboratory evidence.
Probable: A case that meets presumptive laboratory evidence.

Classification of *N. gonorrhoeae* infection cases to identify DGI:

a. Verified: isolation or detection of *N. gonorrhoeae* from a disseminated site of infection (e.g., skin, synovial fluid, blood, or cerebrospinal fluid [CSF] by culture or nucleic acid amplification test (NAAT).

b. Likely: clinical manifestations of DHI without other known causes AND isolation or detection of *N. gonorrhoeae* from a mucosal site of infection by culture or NAAT.

Prevention Interventions

There is currently no preventive vaccine for gonorrhea. The only way to completely avoid gonorrhea is to not have sex (abstinence). But for those who are sexually active, the best preventive strategies include:

1. Mutual monogamy, or a limited number of sex partners.
2. Get tested at least annually (or more often, based on risk factors) and encourage partners to test.
3. Use latex or polyurethane condoms correctly and consistently.
4. Use a condom-safe lubricant (water-based or silicon-based).

Treatment

Treatment should be administered according to the most current CDC STD Treatment Guidelines: www.cdc.gov/std/treatment/default.htm.

It is becoming harder to treat gonorrhea as drug-resistant strains are increasing. Patients should be advised to return to their healthcare provider if symptoms continue for more than 3-5 days after receiving treatment. Providers who suspect treatment failure of cephalosporin antibiotics, and have ruled out patient re-infection, should report to the state department of health to facilitate further testing and treatment options.

References

CDC 2021 STD Treatment Guidelines: www.cdc.gov/std/treatment-guidelines/default.htm
CDC 2023 *Neisseria gonorrhoeae* Case Definition: ndc.services.cdc.gov/case-definitions/gonorrhea-neisseria-gonorrhoeae
CDC Gonorrhea Fact Sheet: www.cdc.gov/std/gonorrhea/stdfact-gonorrhea.htm
CDC STD Surveillance: www.cdc.gov/std/stats
DHHR STD Surveillance: oeps.wv.gov/std/pages/default.aspx
DHHR Gonorrhea Page: oeps.wv.gov/gonorrhea/pages/default.aspx#data
CDC Program Operations Guidelines for STD Prevention: www.cdc.gov/std/program/overview.pdf

Division of STD, HIV, Hepatitis, and Tuberculosis
350 Capitol Street, Room 125, Charleston, WV 25301-3715
Phone: 304-558-2195 - Fax: 304-558-4744
oeps.wv.gov/aboutus/Pages/about_dsh.aspx