DOH 347-653 March 2023

Gonorrhea

1. DISEASE REPORTING

A. Purposes of Reporting and Surveillance

1. To assess trends in epidemic patterns, understand the impact of the burden of infection on populations as well as the healthcare infrastructure, and to better target population-level infection prevention efforts;
2. To ensure the adequate treatment of infected individuals in order to reduce the duration of infectiousness and prevent sequelae of infection (e.g., pelvic inflammatory disease, ectopic pregnancy, infertility);
3. To identify cases in a timely fashion in order to interrupt the chain of infection through patient-level interventions such as management of sexual contacts and behavioral risk reduction counseling.

B. Legal Reporting Requirements

Washington State Administrative Code (WAC) 246-101 provides an overview of legal reporting requirements for notifiable events in Washington. Important updates to the reporting of patient ethnicity, race, and preferred language information, set to be effective January 1, 2023, can be found at the following link: https://app.leg.wa.gov/WAC/default.aspx?cite=246-101-011

1. Health care providers: notifiable to local health jurisdiction within three (3) work days. Cases should be reported using the Sexually Transmitted Infection (STI) Morbidity Report Form: https://www.doh.wa.gov/YouandYourFamily/IllnessandDisease/SexuallyTransmittedDisease/CaseReports
2. Hospitals: notifiable to local health jurisdiction within three (3) work days. Cases should be reported using the STI Morbidity Report Form: https://www.doh.wa.gov/YouandYourFamily/IllnessandDisease/SexuallyTransmittedDisease/CaseReports
3. Laboratories: Positive or indeterminate result from any test method notifiable to local health jurisdiction within two (2) work days.
4. Local health jurisdictions: notify the Washington State Department of Health (DOH), STI Services Section within seven (7) days of case investigation completion; summary information required within 21 days for all reported cases. Enter case report information into the Public Health Issue Management System – Sexually Transmitted Disease (PHIMS-STD).

C. Investigation Responsibilities

1. Gonorrhea cases should be reported to DOH using the PHIMS-STD system to enter

investigation information including provider case report, laboratory, interview, and partner management data.

2. At a minimum, staff who investigate gonorrhea cases should initiate an investigation of the index patient within one (1) workdays of a case being reported or, if the provider is slow to report, within three (3) workdays of receiving a reported positive laboratory result. To initiate a case investigation means that attempts to contact the diagnosed patient for interview have been made. Other cases should be investigated based on local priorities.
3. Local health jurisdiction staff should inform health care providers of the importance of instructing patients to refer sex partners for evaluation and treatment.
4. Local health jurisdiction staff should determine whether the case meets the definition for disseminated gonococcal infection (DGI). If so, a CDC case report form should be completed within 30 days and submitted to DOH.

2. THE DISEASE AND ITS EPIDEMIOLOGY

A. Etiologic Agent

Neisseria gonorrhoeae bacterium.

B. Description of Illness

Most localized gonorrhea infections in people with penises produce symptoms of urethritis; the majority of people with vaginas have no symptoms until complications have occurred**.** The complications of gonorrhea include epididymitis, proctitis, cervicitis, bartholinitis, pelvic inflammatory disease (PID), pharyngitis of adults, vulvovaginitis of children, conjunctivitis of the newborn, arthritis-dermatitis, endocarditis, or meningitis.

Disseminated gonococcal infection (DGI) occurs when *Neisseria gonorrhoeae* from a mucosal site invades the bloodstream and spreads to distant sites in the body. Clinical manifestations of DGI include petechial or pustular acral skin lesions, tenosynovitis, asymmetric polyarthralgia, bacteremia, oligoarticular septic arthritis, or, on rare occasions, endocarditis, osteomyelitis, or meningitis.

C. Gonorrhea in Washington State

In recent years, DOH received over 10,000 reports of gonorrhea per year. To view the most recent morbidity information on reported gonorrhea cases, see here: https://www.doh.wa.gov/YouandYourFamily/IllnessandDisease/SexuallyTransmittedDisease/MorbidityReports

D. Reservoir

Humans.

E. Mode of Transmission

Contact with exudates from mucous membranes of infected people, almost always as a result of sexual activity.

F. Incubation Period

Usually 2-7 days; longer when symptoms occur.

G. Period of Communicability

May extend for months in untreated individuals.

H. Treatment

Uncomplicated gonococcal infection of the cervix, urethra or rectum:
The recommended regimen for uncomplicated gonococcal infection of the cervix, urethra, or rectum is ceftriaxone (500 mg IM as a single dose for persons weighing < 150 kg, or 1 g IM as a single dose for persons weighing > 150 kg). Dual therapy treatment with ceftriaxone and azithromycin is no longer recommended for the treatment of gonorrhea. If ceftriaxone is not an option, cefixime may be used if the patient reports no oral sexual exposure. Due to the emergence of azithromycin resistance in gonorrhea in Washington, monotherapy with 2 g azithromycin is discouraged. Fluoroquinolones (levofloxacin, ciprofloxacin, etc.) are also no longer recommended for the treatment of gonorrhea due to increased prevalence of quinolone-resistant *N. gonorrhoeae* (QRNG). If treating with ceftriaxone or cefixime and chlamydia coinfection has not been excluded, providers should treat for chlamydia with doxycycline 100 mg PO BID for 7 days; during pregnancy, azithromycin 1 g PO as a single dose is recommended to treat chlamydia.

Uncomplicated gonococcal infection of the pharynx:
The recommended regimen for uncomplicated gonococcal infection of the pharynx is ceftriaxone (500 mg IM as a single dose for persons weighing < 150 kg, or 1 g IM as a single dose for persons weighing > 150 kg). If chlamydia infection is identified when pharyngeal gonorrhea testing is performed, treat for chlamydia with doxycycline 100 mg orally 2 times/day for 7 days. Any person with pharyngeal gonorrhea should return 7-14 days after initial treatment for a test of cure by using either culture or NAAT.

Disseminated gonococcal infection:
For DGI, it is recommended that the patient is hospitalized and there is consultation with an infectious disease specialist. The patient should be examined for clinical evidence of endocarditis and meningitis. For gonococcal-related arthritis and arthritis-dermatitis syndrome, the recommended regimen is ceftriaxone 1 g IM or by IV every 24 hours; if chlamydia infection has not been excluded, providers should treat for chlamydia with doxycycline 100 mg orally 2 times per day for 7 days. An alternative regimen would be cefotaxime 1 g by IV every 8 hours or ceftizoxime 1 g every 8 hours, plus treatment for chlamydia with doxycycline 100 mg orally 2 times per day for 7 days if chlamydia has not been excluded. The recommended regimen for gonococcal meningitis and endocarditis is ceftriaxone 1-2 g IV every 12-24 hours in addition to doxycycline 100 mg orally 2 times/day for 7 days if chlamydia has not been excluded. See full CDC treatment guidelines: https://www.cdc.gov/std/treatment-guidelines/

3A. CASE DEFINITIONS: Localized Gonococcal Infection

I. Clinical Criteria for Diagnosis

Infection with *N. gonorrhoeae* is commonly manifested by urethritis, cervicitis, or salpingitis. However, the infection is often asymptomatic, particularly in people with

vaginas.

J. Laboratory Criteria for Diagnosis

1. Confirmatory Laboratory Evidence:
   a. Isolation of typical gram-negative, oxidase-positive diplococci (presumptive *N. gonorrhoeae*) from a clinical specimen, or
   b. Detection of *N. gonorrhoeae* in a clinical specimen by antigen or nucleic acid amplification
2. Presumptive Laboratory Evidence:
   a. Observation of gram-negative intracellular diplococci in a urethral or an endocervical smear

K. Case Definition

1. Probable:
   a. Meets presumptive laboratory evidence: Demonstration of gram-negative intracellular diplococci in a urethral or an endocervical smear
2. Confirmed:
   a. Meets confirmatory laboratory evidence: *N. gonorrhoeae* isolated by culture or detected by nucleic acid amplification

3B. CASE DEFINITIONS: Disseminated Gonococcal Infection

A. Clinical Criteria for Diagnosis

Clinical manifestations of DGI may include petechial or pustular acral skin lesions, tenosynovitis, asymmetric polyarthralgia, bacteremia, oligoarticular septic arthritis, or, on rare occasions, endocarditis, osteomyelitis, or meningitis.

B. Laboratory Criteria for Diagnosis

1. *N. gonorrhoeae* isolated by culture or detected by nucleic acid amplification from a disseminated site of infection (e.g. skin, synovial fluid, blood, or cerebrospinal fluid [CSF])

C. Case Definition

1. Likely:
   a. Clinical manifestations of DGI without other known causes AND isolation or detection of *N. gonorrhoeae* from a mucosal site of infection by culture or nucleic acid amplification test
2. Verified:
   a. 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

4. DIAGNOSIS AND LABORATORY SERVICES

A. Diagnosis

Specimens for gonorrhea testing should be collected from the site suspected to be infected. Medical providers should elicit a sexual history from patients and, based on a patient's sexual practices, should collect specimens from all potential sites of infection, which may include pharyngeal, anorectal, urethral, and/or vaginal/cervical sites. Culture and non-culture tests (e.g., nucleic acid amplification tests [NAATs], nucleic acid hybridization tests, enzyme immunoassay [EIA], direct fluorescent antibody [DFA]) can both reliably detect *N. gonorrhoeae*. However, culture relies on viable organisms for detection, and *N. gonorrhoeae* requires maintenance of a carbon dioxide-enriched, warm environment from the time of specimen collection until the time (48 hours after specimen collection) the specimen is transported to the lab. Because of the stringent incubation requirements of *N. gonorrhoeae* culture, non-culture tests are generally used for screening.

With concerns of increasing antimicrobial resistance, clinicians who diagnose gonorrhea infection in a person with suspected cephalosporin treatment failure should perform culture and antimicrobial susceptibility testing (AST) of relevant clinical specimens and document these results on the initial report.

5. ROUTINE CASE INVESTIGATION

A. Evaluate the Diagnosis

All cases should be confirmed by a laboratory positive test (culture or nonculture tests such as nucleic acid amplification). Localized gonorrhea infections are confirmed through testing a clinical specimen at a mucosal site of infection or testing a urethral or endocervical smear. DGI cases are confirmed through testing at a disseminated site of infection.

B. Identify Source of Infection

Case investigation should be initiated within one (1) business day of receipt of case report or within three (3) days of laboratory report (if no case report has yet been received) for all cases of gonorrhea. However, interviewing priorities may vary depending on the resources of the local health jurisdiction (LHJ). Gonorrhea cases referred to public health follow-up by providers and cases selected for interview for evaluation purposes should be initiated as investigative capacity best permits, and the more rapidly case investigation occurs after diagnosis and report, the more likely effective intervention in the spread of disease will occur. Local health jurisdictions may also establish priorities for public health follow-up such as pregnant people; residents at juvenile detention facilities; gay, bisexual, and other men who have sex with men (GBMSM) cases to enhance HIV prevention; or other populations based on local priorities. The following case investigation method is recommended to be used:

1. Physicians and other diagnosing clinicians are expected to provide medication or prescriptions for medication, and partner management directions to their patients whenever possible. Exceptions are cases where the index case is unwilling to contact one or more exposed partners, where the patient is a man who has sex with men (MSM), or in cases where the clinician's best judgment is that the patient is not

able or willing to follow through with partner contact. Providers should be encouraged to alert their patients that public health may follow up with them to support partner notification and correct treatment. Regardless of physician report, partner services investigations can proceed as above following report of lab or case.

For all gonorrhea cases initiated for interview, a standard confidential partner management interview should be attempted. Patient confidentiality must be preserved throughout the follow-up process. Telephone contact and interview is an acceptable methodology. Letters can be mailed or text messages sent to notify the patient that the LHJ is attempting to interview them. These letters/texts should not have any information on the disease diagnosis to prevent breach of confidentiality if they are opened by someone other than the intended recipient. Partner management interviews should adhere to established protocols, use the Integrated Partner Services Interview Record and Partner Management Record forms, and all information collected will be entered into the PHIMS-STD data system. Case reports, laboratory results and patient interview and partner management information should be entered into the PHIMS-STD data system as soon as these data become available to LHJ staff members. Local health jurisdiction staff may contact Washington State's STI Surveillance Coordinator (STD_Surveillance@doh.wa.gov) for information on accessing and using the PHIMS-STD system.

2. The goal of partner elicitation is to obtain sufficient information to confidentially locate, notify, and refer the partners or suspects for necessary examination, treatment (if appropriate), and risk reduction counseling. Through standard interviews with the patient, individuals who have had sexual contact with the case within sixty (60) days prior to treatment should be identified. This should include both potential sources for the infection and other persons who the patient may have exposed. If the case is eligible, disease intervention staff should determine if the patient is willing and able to contact their partners and deliver partner treatment. If the local health jurisdiction provides expedited partner therapy (EPT) directly, an eligible diagnosed patient can be provided EPT to give to identified partners, or partners can be provided EPT directly. Please note that EPT is not recommended for GBMSM and patients with syphilis due to the increased risk of coinfection with other STIs; these partners should be encouraged to seek care for additional STI testing. If the patient is unwilling or unable to contact their partners, interviewers should obtain as complete locating and identifying information as feasible for each contact, including nicknames and first and last dates of exposure. In addition to collecting all information on the Partner Management Record, each partner named should be reviewed with the patient during the interview to establish a follow-up method. To prevent reinfection, patients should be instructed not to have sex until all sex partners are treated. The patient should also be encouraged to return to their provider to be re-screened for infection in approximately three (3) months.

C. Managing Potentially Exposed Persons

1. All sex partners within 60 days before the onset of symptoms or diagnosis of infection in the patient should be evaluated, tested (if possible) and treated. If a case has not had sex in the 60 days preceding their diagnosis, the most recent sex partner should be treated. Using available information, the sexual partners of reported cases should be contacted as soon as possible following the initial interview by telephone,

field visit, or other method, and referred to their provider for evaluation, testing and treatment. If the contact's treatment cannot be verified within a reasonable time frame, additional attempts should be made to assure treatment.

2. Sexual partners should be treated presumptively for other common bacterial STIs (*Chlamydia trachomatis*), counseled, and offered testing for HIV, syphilis and viral STIs such as HPV or genital herpes, and, where appropriate to risk, viral hepatitis. If testing is unavailable, expedited partner therapy (EPT) methods should be used to treat the partner. EPT should not be used for GBMSM partners, but all GBMSM partners should be referred for HIV and syphilis testing and, if appropriate to their risk, evaluation for PrEP. The disposition (treatment outcome) of each partner must be recorded in PHIMS-STD as soon as this information is available.
3. If the patient identifies a partner who lives outside of the local health jurisdiction, the contact information may be transferred to the appropriate jurisdiction within PHIMS – STD by sharing the case in the system and providing the receiving LHJ with the partner number. For partners residing out of state, LHJ staff should provide the state STI Services Section (360-236-3482) with the relevant information to arrange for necessary follow-up. Alternatively, this information can be provided to state surveillance ICCR via email at STD_ICCR@doh.wa.gov – only the case number and partner number should be indicated via email, and no identifying or protected health information needs to be or should be emailed.
4. Newborns delivered of people with gonorrhea (excluding those delivered by Caesarean section) should be medically evaluated and treated as necessary.

D. Environmental Evaluation

None applicable.

6. CONTROLLING FURTHER SPREAD

A. Infection Control Recommendations

1. Health care setting:

Standard Precautions are a set of protocols designed to reduce the risk of (or prevent) transmission of pathogens. Standard precautions synthesize the major features of Universal (Blood and Body Fluid) Precautions (designed to reduce the risk of transmission of bloodborne pathogens) and Body Substance Isolation (designed to reduce the risk of transmission of pathogens from moist body substances). Under standard precautions, blood, all body fluids, and all body substances of patients are considered potentially infectious (CDC, 1997). For more information, see CDC Program Guidelines: http://www.cdc.gov/std/program/med&lab.pdf

2. General:

When used consistently and correctly, male latex condoms are effective in preventing the sexual transmission of STIs.

B. Case Management

See routine case investigation in Section 5 above.

C. Contact Management

See routine case investigation in Section 5 above.

D. Environmental Measures

None applicable.

7. MANAGING SPECIAL SITUATIONS

Call the DOH Infectious Disease Mainline for special situations (360-236-3444), or reach out to your regional Infectious Disease Field Services point of contact: https://www.doh.wa.gov/AboutUs/ProgramsandServices/DiseaseControlandHealthStatistics/InfectiousDisease/SexuallyTransmittedDiseaseStaff

8. ROUTINE PREVENTION

A. Vaccine Recommendations

No vaccine currently exists for gonorrhea.

B. Prevention Recommendations

Key individual STI prevention messages include:

Abstinence and Mutual Monogamy

Where feasible for a person, abstinence from sex (not having oral, anal, or vaginal sex) is an effective way to avoid STIs. However, abstinence from sex is not feasible or appropriate for all people.

When people are sexually active only with a partner who is only having sex with them – mutual monogamy – and both partners have either tested negative for STIs or been treated for STIs and then waited the appropriate period after treatment, this is an effective way to avoid STIs. However, mutual monogamy is not feasible for all people and can be difficult to assure. It is recommended that sexually active people test regularly for STIs, including HIV and syphilis, in consultation with their partner(s) and healthcare provider.

If you have, or plan to have, more than one sex partner:

- Use a latex condom and lubricant every time you have sex.
- Get tested for asymptomatic STIs including HIV and syphilis.
- Seek and complete vaccination for vaccine preventable conditions which can be sexually transmissible, such as MPOX, HPV, and hepatitis A and B virus.
- If you are a man who has had sex with other men, get tested at least once a year.
- If you are a person who is planning to get pregnant or who is pregnant, get tested for syphilis and HIV as soon as possible, before you have your baby. Ask your health care provider about being tested for other STIs.
- Talk about STIs, including HIV, with each partner before you have sex.
- Learn as much as you can about each partner's past behavior (sex and drug use).
- Ask your partners if they have recently been treated for an STI or have been tested

for HIV; encourage those who have not been tested to do so.

Key STI prevention strategies include:

STI prevention counseling, testing, and referral services – Individuals at risk for STI should be offered counseling regarding methods to eliminate or reduce their risk and testing so that they can be aware of their status and take steps to protect their own health and that of their partners.

Partner Services (or Partner Notification) with strong linkages to prevention and treatment/care services – Sexual partners of persons diagnosed with STIs have been exposed to an STI and are at risk of being infected. Partner services locate these individuals based on information provided by the original diagnosed patient and provide counseling and education about the exposure as well as services to prevent infection or, if infected, linkages to care.

Prevention for high-risk populations – Prevention interventions for high-risk populations at high-risk for STIs, including persons living with HIV, are critical to reducing the spread of STIs and HIV and ensure that those at highest risk of acquiring or transmitting these diseases are given the tools necessary to protect themselves and others from HIV infection. Prevention includes targeted health education and risk reduction, health communication programs, and public information programs for at-risk populations and the general public.

HIV Prevention and Care -- For people at high risk of acquiring HIV, which may include for example some GBMSM patients and their sexual networks and some people who inject drugs, referral to HIV testing (if HIV status is not already known) and referral to PrEP (Pre-exposure Prophylaxis for HIV) navigation or evaluation is key in preventing acquisition of HIV. For people living with HIV who are not receiving medical care or who are not virally suppressed, referral to HIV case management and medical care for HIV infection are key in promoting individual health as well as preventing spread of HIV. More information about PrEP for HIV in Washington State can be found here: https://www.doh.wa.gov/YouandYourFamily/IllnessandDisease/HIV/Prevention/PrEP .

School-based STI Prevention – Schools have a critical role to play in promoting the health and safety of young people and helping them establish lifelong healthy behavior patterns. Washington State requires schools to teach medically accurate comprehensive sex education.

9. UPDATE LOG

03/2023 Revised based on CSTE Position Statement 22-ID-03 with updated gonorrhea and DGI case definitions. Additional minor language revisions.

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To request this document in another format, call **1-800-525-0127**. Deaf or hard of hearing customers, please call 711 (Washington Relay) or email **civil.rights@doh.wa.gov**.