

SUMMARY OF CDC STI TREATMENT GUIDELINES 2021

These recommendations for the treatment of STIs are an adaptation of the 2021 CDC STI Treatment Guidelines; the focus is primarily on STIs encountered in outpatient practice. This table is intended as a source of clinical guidance and is not a comprehensive list of all effective regimens. For more information, please refer to the complete CDC document at <https://www.cdc.gov/std/treatment-guidelines/default.htm>. Please visit our website at <https://www.health.nd.gov/STI> for updates and print versions of this resource, and for additional STI resources and education.

DISEASE	RECOMMENDED REGIMEN	ALTERNATIVE REGIMEN
Chlamydial Infections		
Adults and adolescents	doxycycline 100 mg orally 2x/day for 7 days	azithromycin 1 gm orally in a single dose OR levofloxacin 500 mg orally 1x/day for 7 days
Pregnancy	azithromycin 1 gm orally in a single dose	amoxicillin 500 mg orally 3x/day for 7 days
Genital Herpes Simplex		
First clinical episode of genital herpes ¹	acyclovir 400 mg orally 3x/day for 7–10 days ² OR famciclovir 250 mg orally 3x/day for 7–10 days OR valacyclovir 1 gm orally 2x/day for 7–10 days	
Suppressive therapy for recurrent genital herpes (HSV-2)	acyclovir 400 mg orally 2x/day OR valacyclovir 500 mg orally 1x/day ³ OR valacyclovir 1 gm orally 1x/day OR famciclovir 250 mg orally 2x/day	
Episodic therapy for recurrent genital herpes (HSV-2) ⁴	acyclovir 800 mg orally 2x/day for 5 days OR acyclovir 800 mg orally 3x/day for 2 days OR famciclovir 1 gm orally 2x/day for 1 day OR famciclovir 500 mg once, FOLLOWED BY 250 mg 2x/day for 2 days OR famciclovir 125 mg 2x/day for 5 days OR valacyclovir 500 mg orally 2x/day for 3 days OR valacyclovir 1 gm orally 1x/day for 5 days	
Daily suppressive therapy for persons with HIV infection	acyclovir 400–800 mg orally 2x–3x/day OR famciclovir 500 mg orally 2x/day OR valacyclovir 500 mg orally 2x/day	
Episodic therapy for persons with HIV infection	acyclovir 400 mg orally 3x/day for 5–10 days OR famciclovir 500 mg orally 2x/day for 5–10 days OR valacyclovir 1 gm orally 2x/day for 5–10 days	
Daily suppressive therapy of recurrent genital herpes in pregnant women ⁵	acyclovir 400 mg orally 3x/day OR valacyclovir 500 mg orally 2x/day	
Gonococcal Infections		
Uncomplicated infections of the cervix, urethra, and rectum: adults and adolescents <150 kg ⁶	ceftriaxone 500 mg IM in a single dose ⁷	If cephalosporin allergy: gentamicin 240 mg IM in a single dose PLUS azithromycin 2 gm orally in a single dose If ceftriaxone administration is not available or not feasible: cefixime 800 mg orally in a single dose ⁷
Uncomplicated infection of the pharynx: adults and adolescents <150 kg ⁶	ceftriaxone 500 mg IM in a single dose ⁷	
Pregnancy	ceftriaxone 500 mg IM in a single dose ⁷	
Conjunctivitis	ceftriaxone 1 gm IM in a single dose ⁸	
Disseminated gonococcal infections (DGI) ⁹	ceftriaxone 1 gm IM or by IV every 24 hours ⁷	cefotaxime 1 gm by IV every 8 hours OR ceftizoxime 1 gm every 8 hours
Pelvic Inflammatory Disease (PID)		
Parenteral treatment	ceftriaxone 1 gm by IV every 24 hours PLUS doxycycline 100 mg orally or by IV every 12 hrs PLUS metronidazole 500 mg orally or by IV every 12 hours OR cefotetan 2 gm by IV every 12 hours PLUS doxycycline 100 mg orally or by IV every 12 hrs OR ceftioxin 2 gm by IV every 6 hours PLUS doxycycline 100 mg orally or by IV every 12 hrs	ampicillin-sulbactam 3 gm by IV every 6 hrs PLUS doxycycline 100 mg orally or by IV every 12 hours OR clindamycin 900 mg by IV every 8 hours PLUS gentamicin 2 mg/kg body weight by IV or IM FOLLOWED BY 1.5 mg/kg body weight every 8 hrs Can substitute with 3–5 mg/kg body weight 1x/day
Intramuscular or oral treatment	ceftriaxone 500 mg IM in a single dose ⁶ PLUS doxycycline 100 mg orally 2x/day for 14 days WITH metronidazole 500 mg orally 2x/day for 14 days OR ceftioxin 2 gm IM in a single dose AND probenecid 1 gm orally, administered concurrently in a single dose PLUS doxycycline 100 mg orally 2x/day for 14 days WITH metronidazole 500 mg orally 2x/day for 14 days OR Other parenteral third-generation cephalosporin (e.g., ceftizoxime or cefotaxime) PLUS doxycycline 100 mg orally 2x/day for 14 days WITH metronidazole 500 mg orally 2x/day for 14 days	
Syphilis¹⁰		
Primary, secondary, and early latent: adults (including pregnant women and people with HIV infection)	benzathine penicillin G 2.4 million units IM in a single dose	
Late latent adults (including pregnant women and people with HIV infection)	benzathine penicillin G 7.2 million units total, administered as 3 doses of 2.4 million units IM each at 1-week intervals	
Neurosyphilis, ocular syphilis, and otosyphilis	aqueous crystalline penicillin G 18–24 million units per day, administered as 3–4 million units by IV every 4 hours or continuous infusion, for 10–14 days	procaine penicillin G 2.4 million units IM 1x/day PLUS probenecid 500 mg orally 4x/day, both for 10–14 days
For children or congenital syphilis	See Sexually Transmitted Infections Treatment Guidelines, 2021.	

DISEASE	RECOMMENDED REGIMEN	ALTERNATIVE REGIMEN
Bacterial Vaginosis	metronidazole 500 mg orally 2x/day for 7 days OR metronidazole gel 0.75%, one 5 gm applicator intravaginally, 1x/day for 5 days OR clindamycin cream 2%, one 5 gm applicator intravaginally, at bedtime for 7 days	clindamycin 300 mg orally 2x/day for 7 days OR clindamycin ovules 100 mg intravaginally at bedtime for 3 days ¹¹ OR secnidazole 2 gm orally in a single dose ¹² OR tinidazole 2 gm orally 1x/day for 2 days OR tinidazole 1 gm orally 1x/day for 5 days
Cervicitis ¹³	doxycycline 100 mg orally 2x/day for 7 days	azithromycin 1 gm orally in a single dose
Epididymitis For acute epididymitis most likely caused by sexually transmitted chlamydia and gonorrhea	ceftriaxone 500 mg IM in a single dose ⁶ PLUS doxycycline 100 mg orally 2x/day for 10 days	
For acute epididymitis most likely caused by chlamydia, gonorrhea, or enteric organisms (men who practice insertive anal sex)	ceftriaxone 500 mg IM in a single dose ⁶ PLUS levofloxacin 500 mg orally 1x/day for 10 days	
For acute epididymitis most likely caused by enteric organisms only	levofloxacin 500 mg orally 1x/day for 10 days	
Genital Warts (Human Papillomavirus) External anogenital warts ¹⁴	Patient-applied imiquimod 3.75% or 5% cream ¹⁵ OR podofilox 0.5% solution or gel OR sinecatechins 15% ointment ¹⁵ Provider-administered cryotherapy with liquid nitrogen or cryoprobe OR surgical removal either by tangential scissor excision, tangential shave excision, curettage, laser, or electrosurgery OR trichloroacetic acid (TCA) or bichloroacetic acid (BCA) 80%–90% solution	
Urethral meatus warts	cryotherapy with liquid nitrogen OR surgical removal	
Vaginal warts, ¹⁶ Cervical warts, ¹⁷ Intra-anal warts ¹⁸	cryotherapy with liquid nitrogen OR surgical removal OR TCA or BCA 80%–90% solution	
Lymphogranuloma Venereum	doxycycline 100 mg orally 2x/day for 21 days	azithromycin 1 gm orally 1x/week for 3 weeks ¹⁹ OR erythromycin base 500 mg orally 4x/day for 21 days
Nongonococcal Urethritis (NGU)	doxycycline 100 mg orally 2x/day for 7 days	azithromycin 1 gm orally in a single dose OR azithromycin 500 mg orally in a single dose, THEN 250 mg 1x/day for 4 days
Persistent or Recurrent NGU: test for <i>Mycoplasma genitalium</i> :		
If <i>M. genitalium</i> resistance testing is unavailable but <i>M. genitalium</i> is detected by an FDA-cleared NAAT	doxycycline 100 mg orally 2x/day for 7 days, FOLLOWED BY moxifloxacin 400 mg 1x/day for 7 days	For settings without resistance testing and when moxifloxacin cannot be used: doxycycline 100 mg orally 2x/day for 7 days, FOLLOWED BY azithromycin 1 gm orally on first day, FOLLOWED BY azithromycin 500 mg orally 1x/day for 3 days and a test-of-cure 21 days after completion of therapy
If resistance testing is available, use resistance-guided therapy	Macrolide sensitive doxycycline 100 mg orally 2x/day for 7 days, FOLLOWED BY azithromycin 1 gm orally initial dose, FOLLOWED BY azithromycin 500 mg orally 1x/day for 3 additional days (2.5 gm total) Macrolide resistance doxycycline 100 mg orally 2x/day for 7 days, FOLLOWED BY moxifloxacin 400 mg orally 1x/day for 7 days	
Test for <i>Trichomonas vaginalis</i> in heterosexual men in areas where infection is prevalent	metronidazole 2 gm orally in a single dose OR tinidazole 2 gm orally in a single dose	
Trichomoniasis ²⁰		
Women	metronidazole 500 mg orally 2x/day for 7 days	tinidazole 2 gm orally in a single dose
Men	metronidazole 2 gm orally in a single dose	tinidazole 2 gm orally in a single dose

- Treatment can be extended if healing is incomplete after 10 days of therapy.
- Acyclovir 200 mg orally five times/day is also effective but is not recommended because of the frequency of dosing.
- Valacyclovir 500 mg once a day might be less effective than other valacyclovir or acyclovir dosing regimens for persons who have frequent recurrences (i.e., ≥10 episodes/year).
- Acyclovir 400 mg orally three times/day is also effective but is not recommended because of frequency of dosing.
- Treatment recommended starting at 36 weeks' gestation. (Source: *American College of Obstetricians and Gynecologists. Clinical management guidelines for obstetrician-gynecologists. Management of herpes in pregnancy.* ACOG Practice Bulletin No. 82. Obstet Gynecol 2007;109:1489–98.)
- For persons weighing ≥150 kg, 1 gm ceftriaxone should be administered.
- If chlamydial infection has not been excluded, treat for chlamydia with doxycycline 100 mg orally two times/day for 7 days (if pregnant, treat with azithromycin 1 gm orally in a single dose).
- Providers should consider one-time lavage of the infected eye with saline solution.
- When treating for the arthritis-dermatitis syndrome, the provider can switch to an oral agent guided by antimicrobial susceptibility testing (AST) 24–48 hours after substantial clinical improvement, for a total treatment course of at least 7 days.
- The complete list of recommendations on treating syphilis can be found in Sexually Transmitted Infections Treatment Guidelines, 2021.
- Clindamycin ovules use an oleaginous base that might weaken latex or rubber products (e.g., condoms and diaphragms). Use of such products within 72 hours following treatment with clindamycin ovules is not recommended.
- Oral granules should be sprinkled onto unsweetened applesauce, yogurt, or pudding before ingestion. A glass of water can be taken after administration to aid in swallowing.
- Consider concurrent treatment for gonococcal infection if the patient is at risk for gonorrhea or lives in a community where the prevalence of gonorrhea is high (see Gonorrhea section).
- Persons with external anal or peri-anal warts might also have intra-anal warts. Thus, persons with external anal warts might benefit from an inspection of the anal canal by digital examination, standard anoscopy, or high-resolution anoscopy.
- Might weaken condoms and vaginal diaphragms.
- The use of a cryoprobe in the vagina is not recommended because of the risk for vaginal perforation and fistula formation.
- Management of cervical warts should include consultation with a specialist. For women who have exophytic cervical warts, a biopsy evaluation to exclude high-grade squamous intraepithelial lesion should be performed before treatment is initiated.
- Management of intra-anal warts should include consultation with a specialist.
- Because this regimen has not been validated rigorously, a test-of-cure with *Chlamydia trachomatis* nucleic acid amplification test (NAAT) 4 weeks after completion of treatment can be considered.
- For management of persistent or recurrent infection, refer to Sexually Transmitted Infections Treatment Guidelines, 2021.