STI TREATMENT GUIDELINES TABLE FOR ADULTS & ADOLESCENTS 2022

These recommendations for the treatment of STIs reflect 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 www.nycptc.org for updates and print versions of this resource, and for additional STI resources and education.

DOSING ABBREVIATIONS: d=day; qd=once each day; bid= twice daily; tid=three times a day; qid=four times a day; po=by mouth; IM=intramuscular injection; IV=intravenous; mg-milligram; g=gram; hs=hour of sleep; prn=as needed.

DISEASE	RECOMMENDED REGIMENS	ALTERNATIVE REGIMENS
CHLAMYDIA		
Uncomplicated Genital/Rectal/ Pharyngeal Infections	• Doxycycline§ 100mg po bid x 7 d	• Azithromycin 1g po x 1 **or** Levofloxacin§ 500mg po qd x 7 d
Pregnant Women	• Azithromycin 1g po x 1	• Amoxicillin 500mg po tid x 7 d
GONORRHEA[1] Ceftriaxone 500mg IM single dose is the preferred treatment for adults and adolescents.[2] Dual therapy with doxycycline is recommended for all patients where chlamydia infection has **not been excluded.** All patients with pharyngeal gonorrhea should have a test of cure 8-14 days after treatment. If after gonorrhea treatment symptoms persist for more than 3-5 days send a culture with susceptibility testing from the infected anatomic site.[1]		
Uncomplicated Genital/Rectal/Pharyngeal Infections	• Ceftriaxone 500 mg IM Dual therapy with treatment for chlamydia if chlamydia infection has not been excluded[2*]	**If allergic to cephalosporins or severe penicillin allergy** • Gentamicin 240mg IM plus azithromycin 2 g po single dose **If an intramuscular injection cannot be given:** Cefixime[3] 800 mg po x 1
Pregnant Women	• Ceftriaxone 500 mg IM Dual therapy with treatment for chlamydia if chlamydia infection has not been excluded[2]	**If allergic to cephalosporins or severe penicillin allergy: consult ID**
PELVIC INFLAMMATORY DISEASE **Oral regimens** (For parenteral regimens, see https://www.cdc.gov/std/treatment-guidelines/pid.htm)	• Ceftriaxone 500 mg IM x 1 **or** • Cefoxitin 2g IM x 1 with Probenecid 1g po x 1 given concurrently **or** • Other parenteral third-generation cephalosporin PLUS • Doxycycline 100mg po bid x 14 d **AND** • Metronidazole[4] 500mg po bid x 14 d	• Gentamicin 240mg IM x 1 AND Azithromycin 2g PO x 1 **PLUS** Doxycycline 100mg po bid x 14 d **AND** Metronidazole4 500mg po bid x 14 d
CERVICITIS	• Doxycycline§100mg po bid x 7d Consider concurrent treatment for GC if at risk for GC or living in area of high prevalence of GC	Azithromycin 1g PO x 1 OR Consider concurrent treatment for GC if at risk for GC or living in area of high prevalence of GC
NONGONOCOCCAL URETHRITIS	• Doxycycline 100mg po bid x 7 d	Azithromycin 1g PO x 1 OR Azithromycin 500mg PO x 1 followed by 250mg daily for 4 days
RECURRENT AND PERSISTENT URETHRITIS	Evaluate for possible re-exposure or treatment failure and consider testing and/or treatment for T vaginalis and M Genitalium with treatment as below	
ACUTE EPIDIDYMITIS	**Likely due to gonorrhea or chlamydia**: • Ceftriaxone 500mg IM x 1 **PLUS** • Doxycycline 100mg po bid x **10 d** • **Likely caused by chlamydia, gonorrhea, or enteric organisms (men who practice insertive anal sex)** • Ceftriaxone 500mg IM x 1 **PLUS** Levofloxacin 500 mg orally once daily for 10 days	**Likely caused by enteric organisms only** Levofloxacin 500 mg orally once daily for 10 days
TRICHOMONIASIS		
Women	• Metronidazole 500mg twice daily for 7 days	• Tinidazole 2g by mouth x 1
Men	• Metronidazole 2g PO x 1	• Tinidazole 2g by mouth x 1
BACTERIAL VAGINOSIS		
Adults/Adolescents	• Metronidazole 500mg po bid x 7 d **or** Metronidazole gel 0.75%, one full applicator (5g) intra vaginally qd x 5 d **or** Clindamycin cream[5] 2%, one full applicator (5g) intra vaginally qhs x 7 d	• Clindamycin 300mg po bid x 7 d **or** • Clindamycin ovules 100mg intravaginally qhs x 3d **or** • Secnidazole 2g oral granules x 1§ **or** • Tinidazole 2g po qd x 2 d§ **or** Tinidazole 1g po qd x 5 d§ **or**
ACUTE PROCTITIS[6]	• Ceftriaxone 500 IM x 1 **PLUS** • Doxycycline§ 100mg po bid x 7 d • Should treat for LGV with Doxycyline 100mg twice daily x 21 days in the presence of bloody discharge, perianal or mucosal ulcers, or tenesmus and a positive rectal chlamydia test.	
LYMPHOGRANULOMA VENEREUM	• Doxycycline§ 100mg po bid x 21 d[7]	• Azithromycin 1 gm orally once weekly for 3 weeks[7] **OR** •. Erythromycin base 500 mg orally 4 times/day for 21 days
CHANCROID	• Azithromycin 1g po x 1 **or** Ceftriaxone 250mg IM x 1 **or** Ciprofloxacin§ 500mg po bid x 3 d **or** Erythromycin base 500mg po tid x 7 d	

DISEASE	RECOMMENDED REGIMENS	ALTERNATIVE REGIMENS
SYPHILIS Benzathine penicillin G, Bicillin®L-A, (trade name), is the preferred drug for treatment of all stages of syphilis and is the only treatment with documented efficacy for syphilis during pregnancy.[8]		
Adults (including HIV-Co-infected)		
Primary, Secondary, and Early Latent	• Benzathine penicillin G 2.4 million units IM x1	• Doxycycline[9,§] 100mg po bid x 14 d **or** • Tetracycline[9,§] 500mg po qid x 14 d **or**
Late Latent and Latent of Unknown Duration	• Benzathine penicillin G 7.2 million units, administered as 3 doses of 2.4 million units IM each, at 1-week intervals[10]	• Doxycycline[9,§] 100mg po bid x 28 d **or** • Tetracycline[9,§] 500mg po qid x 28 d
Neurosyphilis (Otic and Ophthalmologic)	• Aqueous crystalline penicillin G 18-24 million units qd, administered as 3-4 million units IV q 4 hrs or continuous infusion x 10-14 d[11]	• Procaine penicillin G, 2.4 million units IM qd x 10-14 d **plus** Probenecid 500mg po qid x 10-14 d[11] **or**
Pregnant Women		
Primary, Secondary, and Early Latent	• Benzathine penicillin G 2.4 million units IM x1	• None. If PCN allergic, desensitize and treat.
Late Latent and Latent of Unknown Duration	• Benzathine penicillin G 7.2 million units, administered as doses of 2.4 million units IM each, at 1-week intervals	• None. If PCN allergic, desensitize and treat.
Neurosyphilis	• Aqueous crystalline penicillin G 18-24 million units qd, administered as 3-4 million units IV q 4 hrs or continuous infusion x 10-14 d[11]	• Procaine penicillin G, 2.4 million units IM qd x10-14 d **PLUS** Probenecid 500mg po qid x 10-14 d[11] If PCN allergic, desensitize and treat
ANOGENITAL WARTS (Human Papilloma Virus)		
External Genital/Perianal[12]	**Patient Applied** • Podofilox 0.5% solution/gel[13,14]: apply bid x 3 d followed by 4 d no treatment; use for up to 4 cycles. Total area treated not to exceed 10cm^2 and total volume used ≤ 0.5mL per day or • Imiquimod 5% cream[13,15]: apply qhs 3x/week for up to 16 weeks; wash off after 6-10 hours or • Sinechatechin 15% ointment[13,14,15,16]: apply tid (0.5cm strand of ointment per wart) for a maximum of 16 weeks	**Provider Administered** • Cryotherapy: repeat applications q1-2 weeks **or** • Surgery—electrocautery, excision, laser, curettage Trichloroacetic acid (TCA) 80%- 90% or Bichloroacetic acid (BCA) 80%- 90%: apply q week prn
ANOGENITAL HERPES (HSV-2 and HSV-1)		
First Clinical Episode	• Acyclovir 400mg po tid x 7-10 d • Famciclovir 250mg po tid x 7-10 d **or** • Valacyclovir 1g po bid x 7-10 d	
Recurrent – HSV- 2	**Suppressive Therapy** • Acyclovir 400mg po bid **or** • Famciclovir 250mg po bid **or** • Valacyclovir 500mg po qd or 1g po qd	**Episodic Therapy for Recurrent Episodes** • Acyclovir 400mg po tid x 5 d **or** 800mg po bid x 5 d **or** 800mg po tid x 2 d **or** • Famciclovir 125mg po bid x 5 d **or** 1g po bid x 1 d **or** 500mg po x1, then 250 mg bid x 2d **or** • Valacyclovir 500mg po bid x 3d **or** 1g po qd x 5 days
Suppressive therapy in pregnancy	Acyclovir 400mg PO TID OR Valacyclovir 500mg PO BID	
HIV Co-Infected[17]		
	Suppressive Therapy • Acyclovir 400-800mg po bid or tid **or** • Famciclovir 500mg po bid **or** • Valacyclovir 500mg po bid	**Episodic Therapy for Recurrent Episodes** • Acyclovir 400mg po tid x 5-10 d **or** • Famciclovir 500mg po bid x 5-10 d **or** • Valacyclovir 1g po bid x 5-10 d

§ Contraindicated in pregnant and nursing women

1 For suspected treatment failure (including persistent symptoms 3-5 days after treatment): Re-test with NAAT and culture with antibiotic susceptibility testing from affected anatomical site(s). If patient was not treated with the recommended regimen, retreat with Ceftriaxone 500 mg IM as a single dose, unless allergies preclude use of that regimen. If patient was previously treated with the recommended regimen or allergies preclude use of the regimen, consult with a local ID specialist or with the NYC PTC http://www.nycptc.org For further guidance, go to www.cdc.gov/std/Gonorrhea/treatment.htm. In NYC, to report suspected treatment failures call the Provider Access Line: 866- 692-3641. If a patient is treated for oral gonorrhea they should have a test of cure in 8-14 days

2 This is for patients with uncomplicated gonorrhea weighing <150Kg. Dose is 1g for those >150Kg.

3 Oral cephalosporins give lower and less-sustained bacteriocidal levels than ceftriaxone 500 mg and have limited efficacy for treating pharyngeal GC. Therefore, ceftriaxone is the preferred medication if at all possible. No other oral cephalosporin is recommended due to inferior efficacy and less favorable pharmacodynamics.

4 Metronidazole offers additional anaerobic coverage and will treat BV and trichomoniasis, if present.

5 Oil-based; might weaken latex condoms and diaphragms for up to 5 days after use

6 Examine patients by anoscopy and evaluate for infection with HSV, gonorrhea, chlamydia and syphilis

7 Based on retrospective studies courses may be effective but randomized controlled trials are needed

8 Benzathine penicillin G is available in one long-acting formulation, Bicillin® L-A, which contains only benzathine penicillin G. Combination penicillin drug products, such as Bicillin® C-R, contain both long- and short-acting penicillins and should not be used to treat syphilis.

9 Use alternative regimens for penicillin-allergic, non-pregnant patients only. Data to support the use of alternatives to penicillin are limited. If compliance or follow-up cannot be ensured, the patient should be desensitized and treated with benzathine penicillin.

10 An interval of 10-14 days between doses of benzathine penicillin for late or latent syphilis of unknown duration might be acceptable before restarting the sequence of injections. Pregnant women who have delays in any therapy dose >9 days between doses should repeat the full course of therapy.

11 Some specialists recommend an additional 2.4 million units of benzathine penicillin G IM qweek for up to 3 weeks after completion of neurosyphilis treatment.

12 Mucosal genital warts (cervical, vaginal, anorectal, urethral meatus) should be managed in consultation with a specialist.

13 Safety profile during pregnancy not established; Pregnancy Category C.

14 Do not wash off after initial application.

15 May weaken condoms and diaphragms.

16 Use is not recommended for HIV-infected or other immunocompromised persons, or those with clinical genital herpes.

17 If HSV lesions persist or recur while receiving antiviral treatment, suspect antiviral resistance. Obtain a viral isolate for sensitivity testing and consult with an HIV specialist.