

**NORTH CAROLINA HIV/STD PREVENTION AND CARE SECTION
STD TREATMENT GUIDELINES FOR ADULTS AND ADOLESCENTS**

Effective 2006

These guidelines reflect CDC's 2006 Guidelines for Treatment of Sexually Transmitted Diseases. These guidelines are intended as a source of clinical guidance; they are not a comprehensive list of all effective regimens and should not be construed as standards or inflexible rules. Confidential notification of sexual partners is an important component of STD treatment. More information and the complete CDC Guidelines are available from the HIV/STD Prevention and Care Section at (919) 733-7301. The dollar amount included after some regimens is the approximate cost of treating STD infections with state-supplied medications.

DISEASE	RECOMMENDED REGIMENS	ALTERNATIVE REGIMENS / SPECIAL NOTES
CHLAMYDIAL INFECTION (uncomplicated) HIV testing is recommended for all persons who seek evaluation and treatment for STDs		
Adults and Adolescents	Azithromycin ¹ 1gm po [\$1.88], or Doxycycline ² 100 mg po bid x 7 d [\$0.42]	Erythromycin ³ base 500 mg po qid x 7 d [\$3.92], or Erythromycin ³ ethylsuccinate 800 mg po qid x 7 d, or Ofloxacin ^{4,15} 300 mg po bid x 7 d, or Levofloxacin ^{4,15} 500mg po daily x 7d
Pregnancy	Azithromycin ¹ 1gm po [\$1.88], or Amoxicillin ³ 500 mg po tid x 7 d [\$0.21]	Erythromycin ³ base 500 mg po qid x 7 d [\$3.92], Erythromycin ³ base 250 mg po qid x 14 d [\$3.92], Erythromycin ³ ethylsuccinate 800 mg po qid x 7 d, Erythromycin ³ ethylsuccinate 400 mg po qid x 14 d
GONOCOCCAL INFECTION (uncomplicated) HIV testing is recommended for all persons who seek evaluation and treatment for STDs		
Adults and Adolescents	Cefpodoxime 400 mg po [\$3.32], or Ceftriaxone 125 mg IM [\$0.66], or Gentamicin ⁶ 240 mg IM [\$5.79], or Azithromycin ^{1,14} 2 gm po [\$3.76], or Ciprofloxacin ^{4,15} 500 mg po, or Levofloxacin ^{4,15} 250mg po PLUS If Chlamydial Infection is <u>not</u> Ruled Out Azithromycin ¹ 1gm po [\$1.88], or Doxycycline ² 100 mg po bid x 7 d [\$0.42]	Spectinomycin ^{6,13} 2 g IM, Cefixime ^{5,12} 400 mg po, or Ceftrizoxime 500 mg IM, or Cefoxitin 2g IM with 1g probenecid po, or Cefotaxime 500 mg IM, or Gatifloxacin ^{4,15} 400mg po, or Norfloxacin ^{4,15} 800 mg po, or Lomefloxacin ^{4,15} 400 mg po PLUS If Chlamydial Infection is <u>not</u> Ruled Out Azithromycin ¹ 1gm po [\$1.88], or Doxycycline ² 100 mg po bid x 7 d [\$0.42] (No additional, if treated with 2 gm po Azithromycin)
Pregnancy	Cefpodoxime 400 mg po [\$3.32], or Ceftriaxone 125 mg IM [\$0.66], or Gentamicin ⁶ 240 mg IM [\$5.79] PLUS If Chlamydial Infection is <u>not</u> Ruled Out Azithromycin ¹ 1gm po [\$1.88], or Erythromycin ³ base 500 mg po qid x 7 d [\$3.92], or Amoxicillin ³ 500 mg po tid x 7 d [\$0.21]	Spectinomycin ^{6,13} 2 g IM, Cefixime ^{5,12} 400 mg po, or Ceftrizoxime 500 mg IM, or Cefoxitin 2g IM with 1g probenecid po, or Cefotaxime 500 mg IM PLUS If Chlamydial Infection is <u>not</u> Ruled Out Azithromycin ¹ 1gm po [\$1.88], or Erythromycin ³ base 500 mg po qid x 7 d [\$3.92], Amoxicillin ³ 500 mg po tid x 7 d [\$0.21]
<i>Women who are pregnant should not be treated with quinolones or tetracyclines.</i>		
Pharyngeal	Cefpodoxime 400 mg po [\$3.32], or Ceftriaxone 125 mg IM [\$0.66], or Ciprofloxacin ^{4,15} 500 mg po PLUS If Chlamydial Infection is <u>not</u> Ruled Out Azithromycin ¹ 1gm po [\$1.88], or Doxycycline ² 100 mg po bid x 7 d [\$0.42]	Gentamicin ⁶ 240 mg IM [\$5.79] If Gentamicin 240 mg IM is used for pharyngeal then patient should return for test of cure. PLUS If Chlamydial Infection is <u>not</u> Ruled Out Azithromycin ¹ 1gm po [\$1.88], or Doxycycline ² 100 mg po bid x 7 d [\$0.42]
MUCOPURULENT CERVICITIS	Recommend empiric chlamydia treatment. Consider empiric gonorrhea treatment if prevalence is high (most NC Counties and all STD Clinics).	
NONGONOCOCCAL URETHRITIS	Azithromycin ¹ 1gm po [\$1.88], or Doxycycline ² 100 mg po bid x 7 d [\$0.42]	Erythromycin ³ base 500 mg po qid x 7 d [\$3.92], or Erythromycin ethylsuccinate 800 mg po qid x 7 d, or Ofloxacin ^{3,15} 300 mg po bid x 7 d, or Levofloxacin ^{4,15} 500mg po daily x 7d
PELVIC INFLAMMATORY DISEASE⁷ (outpatient regimens)	Ceftriaxone 250 mg IM [\$1.31], or Cefoxitin 2g IM with 1g probenecid po, or Gentamicin ⁶ 240 mg IM [\$5.79] PLUS Doxycycline ² 100 mg po bid x 14 d [\$0.84], or Clindamycin 450 mg po qid x 14 d With Or Without Metronidazole 500 mg po bid x 14 d [\$1.08]	Ofloxacin ^{4,15} 400mg bid x 14 d or Levofloxacin ^{4,15} 500mg daily x 14 d With Or Without Metronidazole 500 mg po bid x 14 d [\$1.08]
EPIDIDYMITIS⁷	For acute epididymitis most likely caused by gonorrhea or chlamydial infection: Ceftriaxone 250 mg IM [\$1.31] PLUS Doxycycline ² 100 mg po bid x 10 d [\$\$0.60]	For acute epididymitis most likely caused by enteric organisms, or for patients allergic to cephalosporins and/or tetracyclines:(Recommended) Ofloxacin ^{4,15} 300 mg po bid x 10 d or Levofloxacin ^{4,15} 500mg po daily x 10 d
TRICHOMONIASIS	Metronidazole 2 g po [\$0.16], or Tinidazole 2 g po	Metronidazole 500 mg po bid x 7 d [\$0.56]
HIV	HIV testing is recommended for all persons who seek evaluation and treatment for STDs.	
HEPATITIS B	Hepatitis B Vaccine is recommended for all unvaccinated, uninfected persons being evaluated for an STD.	
BACTERIAL VAGINOSIS HIV testing is recommended for all persons who seek evaluation and treatment for STDs		
Adults and Adolescents	Metronidazole 500 mg po bid x 7 d [\$0.56], or Metronidazole gel 0.75%, one full applicator (5g) intravaginally once day x 5 d, or Clindamycin ¹⁶ cream 2%, one full applicator (5g) intravaginally at bedtime x 7 d	Clindamycin 300 mg po bid x 7 d or Clindamycin ovules 100g intravaginally once at bedtime x 3 d
Pregnancy	Metronidazole 250 mg po tid x 7 d [\$0.42], or Metronidazole 500 mg po bid x 7 d [\$0.56], or Clindamycin 300 mg po bid x 7 d	

DISEASE	RECOMMENDED REGIMENS	ALTERNATIVE REGIMENS / SPECIAL NOTES
HERPES SIMPLEX VIRUS HIV testing is recommended for all persons who seek evaluation and treatment for STDs		
First Clinical Episode	Acyclovir 400 mg po tid for 7-10 d ⁹ or Famciclovir 250 mg po tid for 7-10 d ⁹ or Valacyclovir 1.0 g po bid for 7-10 d ⁹	<i>Treatment might be extended if healing is incomplete after 10 days of therapy.</i>
Recurrent Episodes	Acyclovir 800 mg po tid for 2 d, or Famciclovir 1000 mg po bid for 1 d, or Valacyclovir 500 mg po bid for 3 d, or Valacyclovir 1g po daily for 5 d	Recommended regimens in persons with HIV Acyclovir 400 mg po tid x 5-10 d, or Famciclovir 500 mg po tid x 5-10 d, or Valacyclovir 1.0 g po bid x 5-10 d
Daily Suppressive Therapy	Acyclovir 400 mg po bid, or Famciclovir 250 mg po bid, or Valacyclovir ¹⁷ 500 mg po or Valacyclovir 1.0 g po <i>Providers should periodically review suppressive therapy with patient.</i>	Recommended regimens in Persons with HIV Acyclovir 400-800 mg po bid or tid, or Famciclovir 500 mg po bid, or Valacyclovir ¹⁷ 500 mg po bid <i>Providers should periodically review suppressive therapy with patient.</i>
SYPHILIS In Adults HIV testing is recommended for all persons who seek evaluation and treatment for STDs		
Primary, Secondary, and Early Latent (< 1 yr)	Benzathine penicillin G 2.4 million units IM 2.4 million units IM [\$11.14]	Doxycycline 100 mg po bid x 14 d [\$0.84], or Tetracycline 500 mg po qid x 14 d
Late Latent and Unknown Duration	Benzathine penicillin G 7.2 million units, administered as 3 doses of 2.4 million units IM, at 1-week intervals [\$33.42]	Doxycycline 100 mg po bid x 28 d [\$1.68], or Tetracycline 500 mg po qid x 28 d
Neurosyphilis	Aqueous crystalline penicillin G 18-24 million units per day, administered as 3-4 million units IV every 4 hour or continuous infusion, for 10-14 d	Procaine penicillin 2.4 million units IM once daily Plus Probenecid 500 mg po qid both for 10-14 d
SYPHILIS HIV Infection		
Primary, Secondary, and Early Latent (< 1 yr)	Benzathine penicillin G 2.4 million units IM 2.4 million units IM [\$11.14]	None. HIV-infected patients allergic to penicillin should be treated with penicillin after desensitization.
Late Latent and Unknown Duration	Benzathine penicillin G 7.2 million units, administered as 3 doses of 2.4 million units IM, at 1-week intervals [\$33.42]	None. HIV-infected patients allergic to penicillin should be treated with penicillin after desensitization.
Neurosyphilis	Aqueous crystalline penicillin G 18-24 million units per day, administered as 3-4 million units IV every 4 hour or continuous infusion, for 10-14 d	Procaine penicillin 2.4 million units IM once daily Plus Probenecid 500 mg po qid both for 10-14 d
SYPHILIS Pregnancy HIV testing is recommended for all persons who seek evaluation and treatment for STDs		
Primary, Secondary, and Early Latent (< 1 yr)	Benzathine penicillin G 2.4 million units IM 2.4 million units IM [\$11.14] Consider 2nd dose one week later.	None. Pregnant patients allergic to penicillin should be treated with penicillin after desensitization.
Late Latent and Unknown Duration	Benzathine penicillin G 7.2 million units, administered as 3 doses of 2.4 million units IM, at 1-week intervals [\$33.42]	None. Pregnant patients allergic to penicillin should be treated with penicillin after desensitization.
Neurosyphilis	Aqueous crystalline penicillin G 18-24 million units daily, administered as 3-4 million units IV q 4 hrs x 10-14 d	Procaine penicillin 2.4 million units IM once daily Plus Probenecid 500 mg po qid both for 10-14 d
CHANCROID		
	Azithromycin ¹ 1gm po [\$1.88], or Ceftriaxone 250 mg IM [\$1.31], or Ciprofloxacin ^{4,15} 500 mg po bid x 3 d or Erythromycin base 500 mg po tid x 7 d [\$2.94]	
LYMPHOGRANULOMA VENEREUM	Doxycycline ² 100 mg po bid x 21 d [\$1.26]	Erythromycin base 500 mg po qid x 21 d [\$11.76]
HUMAN PAPILLOMAVIRUS <i>External Genital and Perianal Warts¹⁰</i>	Patient-Applied: Podofilox ⁸ 0.5% solution or gel, patient applies to visible warts bid for 3 days, rests 4 days, repeats for 4 cycles max. or Imiquimod ⁸ 5% cream, patient applies at bedtime 3x/week for 16 weeks max. Wash off each application after 6-10 hours. Repeat every 1-2 weeks as necessary	Provider-Administered:(Recommended) Cryotherapy, Liquid nitrogen or cryoprobe. Repeat application every 1-2 weeks or Podophyllin ⁸ Resin 10%-25% in tincture of benzoin, apply small amount; allow to dry, wash off in 1-4 hours; repeat weekly if necessary. Guidelines 1) limited to <0.5ml or area of <10cm sq and 2) no open lesion or wound in treatment area or Trichloroacetic acid or Bichloroacetic acid ⁸ (TCA or BCA), 80-90% apply small amount, allow to dry; repeat weekly if necessary.
PEDICULOSIS PUBIS	Permethrin 1% creme rinse, apply to affected area, wash off after 10 minutes or Pyrethrins with piperonyl butoxide, apply to affected area, wash off after 10 minutes.	Malathion 0.5% lotion, applied for 8-12 hours and wash off or Ivermectin 250 ug/kg orally, repeated in 2 weeks
SCABIES	Permethrin 5% cream, apply to all areas of body from neck down; wash off after 8-14 hours or Ivermectin 200 ug/kg orally, repeated in 2 weeks	Lindane ¹¹ 1%, 1 oz. of lotion or 30 g of cream, applied thinly to all areas of body from neck down, washed off after 8 hours

1. Safety not established in pregnant and lactating women.

2. Contraindicated for pregnant or lactating women and children <8 years of age.

3. Less efficacious than doxycycline or azithromycin; consider test of cure 3 weeks after completion of therapy.

4. Contraindicated for pregnant or lactating women and children who are <18 years of age and weigh <45 kg.

5. Not effective against pharyngeal gonorrhea.

6. For patients who cannot tolerate fluoroquinolones or cephalosporins; if used for pharyngeal gonorrhea, must perform test of cure because of poor efficacy.

7. Patients who do not respond to oral therapy within 72 hours should be re-evaluated.

8. Safety during pregnancy not established.

9. Treatment may be extended if healing is incomplete after 10 days of therapy.

10. Vaginal, cervical, urethral meatal, oral and anal warts may require referral to an appropriate specialist.

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Evaluate effectiveness after three treatments.

11. Contraindicated for pregnant or lactating women and children <2 years of age. Do not use after a bath; should not be used by persons with extensive dermatitis.

12. As of 10/25/2002, Wyeth has discontinued manufacture of all Cefixime (Suprax) tablets.

13. As of 11/1/2005, Pfizer has discontinued US production of Spectinomycin (Trobinin).

14. Patients who receive 2 g of Azithromycin should wait thirty minutes, and be given an alternative treatment if they vomit within this time frame

15. Quinolones should not be used in MSM or persons and or partners with a history of recent foreign travel and or infections acquired in Calif., Hawaii, or areas with QRNG prevalence.

16. Topical Clindamycin should not be used in second half of pregnancy

17. Recommended in patient who have fewer than 10 outbreaks in a year.