

Sexually Transmitted Diseases

Updated Summary of

2010

CDC Treatment Guidelines

National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention
Division of STD Prevention



Sexually Transmitted Diseases: Updated Summary of 2010 CDC Treatment Guidelines

These summary guidelines reflect the August 2012 update to the 2010 CDC Guidelines for Treatment of Sexually Transmitted Diseases. CDC issues new recommendations for treating uncomplicated gonorrhea in this update. This summary is intended as a source of clinical guidance. An important component of STD treatment is partner management. Providers can arrange for the evaluation and treatment of sex partners either directly or with assistance from state and local health departments. Complete guidelines can be viewed online at www.cdc.gov/std/treatment/2010.

| DISEASE | RECOMMENDED Rx | DOSE/ROUTE | ALTERNATIVES |
|---|---|--|--|
| Bacterial Vaginosis Nonpregnant women | metronidazole oral ¹ metronidazole gel 0.75% ¹ clindamycin cream 2% ^{1,2} | OR 500 mg orally 2x/day for 7 days One 5 g applicator intravaginally 1x/day for 5 days OR One 5 g applicator intravaginally at bedtime for 7 days | ◆ tinidazole 2 g orally 1x/day for 2 days ◆ tinidazole 1 g orally 1x/day for 5 days OR clindamycin 300 mg orally 2x/day for 7 days OR clindamycin ovules 100 mg intravaginally at bedtime for 3 days |
| Pregnancy ^{3,4} | metronidazole oral ¹ clindamycin oral | OR 500 mg orally 2x/day for 7 days or 250 mg orally 3x/day for 7 days 300 mg orally 2x/day for 7 days; See complete guidelines for dosing | |
| Cervicitis ⁵ | azithromycin doxycycline ⁶ | OR 1 g orally in a single dose 100 mg orally 2x/day for 7 days | |
| Chlamydial Infections Adults, adolescents, and children aged ≥8 years | azithromycin doxycycline ⁶ | OR 1 g orally in a single dose 100 mg orally 2x/day for 7 days | erythromycin base ⁷ 500 mg orally 4x/day for 7 days erythromycin ethylsuccinate ⁸ 800 mg orally 4x/day for 7 days OR levofloxacin ⁹ 500 mg orally 1x/day for 7 days OR ofloxacin ⁹ 300 mg orally 2x/day for 7 days |
| Pregnancy ³ | azithromycin ¹⁰ amoxicillin | OR 1 g orally in a single dose 500 mg orally 3x/day for 7 days | erythromycin base ^{7,11} 500 mg orally 4x/day for 7 days OR erythromycin base 250 mg orally 4x/day for 14 days OR erythromycin ethylsuccinate 800 mg orally 4x/day for 7 days OR erythromycin ethylsuccinate 400 mg orally 4x/day for 14 days |
| Children (<45 kg): urogenital, rectal | erythromycin base ¹² or ethylsuccinate | 50 mg/kg/day orally (4 divided doses) daily for 14 days | |
| Neonates: ophthalmia neonatorum, pneumonia | erythromycin base ¹² or ethylsuccinate | 50 mg/kg/day orally (4 divided doses) daily for 14 days | |
| Epididymitis ^{13,14} <i>For acute epididymitis most likely due to enteric organisms or with negative GC culture or NAAT:</i> | ceftriaxone doxycycline OR levofloxacin ofloxacin | PLUS 250 mg IM in a single dose 100 mg orally 2x/day for 10 days OR 500 mg orally 1x/day for 10 days 300 mg orally 2x/day for 10 days | |
| Genital Herpes Simplex First clinical episode of genital herpes | acyclovir acyclovir famciclovir ¹⁵ valacyclovir ¹⁵ | OR 400 mg orally 3x/day for 7-10 days ¹⁶ OR 200 mg orally 5x/day for 7-10 days ¹⁶ OR 250 mg orally 3x/day for 7-10 days ¹⁶ OR 1 g orally 2x/day for 7-10 days ¹⁶ | |
| Episodic therapy for recurrent genital herpes | acyclovir acyclovir acyclovir famciclovir ¹⁵ famciclovir ¹⁵ famciclovir ¹⁵ valacyclovir ¹⁵ valacyclovir ¹⁵ | OR 400 mg orally 3x/day for 5 days OR 800 mg orally 2x/day for 5 days OR 800 mg orally 3x/day for 2 days OR 125 mg orally 2x/day for 5 days OR 1000 mg orally 2x/day for 1 day ¹⁶ OR ◆ 500 mg orally once, followed by 250 mg 2x/day for 2 days OR 500 mg orally 2x/day for 3 days OR 1 g orally 1x/day for 5 days | |
| Suppressive therapy ¹⁷ for recurrent genital herpes | acyclovir famciclovir ¹⁵ valacyclovir ¹⁵ valacyclovir ¹⁵ | OR 400 mg orally 2x/day OR 250 mg orally 2x/day OR 500 mg orally once a day OR 1 g orally once a day | |
| Recommended regimens for episodic infection in persons with HIV infection | acyclovir famciclovir ¹⁵ valacyclovir ¹⁵ | OR 400 mg orally 3x/day for 5-10 days OR 500 mg orally 2x/day for 5-10 days OR 1 g orally 2x/day for 5-10 days | |
| Recommended regimens for daily suppressive therapy in persons with HIV infection | acyclovir famciclovir ¹⁵ valacyclovir ¹⁵ | OR 400-800 mg orally 2-3x/day OR 500 mg orally 2x/day OR 500 mg orally 2x/day | |
| Genital Warts ¹⁸ (Human Papillomavirus) External genital and perianal warts | Patient Applied podofilox 0.5% ¹⁵ solution or gel imiquimod 5% ¹⁵ cream ◆ sinecatechins 15% ointment ¹⁵ Provider Administered Cryotherapy podophyllin resin 10%-25% ¹⁵ trichloroacetic acid or bichloroacetic acid 80%-90% OR surgical removal | OR Apply to visible warts 2x/day for 3 days, rest 4 days, 4 cycles max. OR Apply once h.s., wash off after 6-10 hours 3x/week QOD, 16 weeks max. Apply 3x/day, 16 weeks max; See complete CDC guidelines. OR Apply small amount, dry, wash off in 1-4 hours. Repeat weekly if necessary OR Apply small amount, dry, apply weekly if necessary | Intralesional interferon Laser surgery |
| ★ Gonococcal Infections ¹⁹ Adults, adolescents, and children >45 kg: urogenital, rectal | ceftriaxone PLUS azithromycin ⁶ doxycycline ⁹ | OR ◆ 250 mg IM in a single dose OR 1 g orally in a single dose 100 mg orally 2x/day for 7 days | cefixime ²⁰ 400 mg orally in a single dose azithromycin ¹⁰ 1 g orally in a single dose doxycycline ⁶ 100 mg 2x/day for 7 days test-of-cure If the patient has severe cephalosporin allergy: azithromycin 2 g orally in a single dose test-of-cure |
| ◆ Pharyngeal ²¹ | ceftriaxone PLUS azithromycin ⁶ doxycycline ⁹ | OR 250 mg IM in a single dose OR 1 g orally in a single dose 100 mg orally 2x/day for 7 days | |
| Pregnancy ³ | See complete CDC guidelines. | | |
| Adults and adolescents: conjunctivitis | ceftriaxone | 1 g IM in a single dose, irrigate infected eye with saline solution once | |
| Children (< 45 kg): urogenital, rectal, pharyngeal | ceftriaxone ²² | ◆ 125 mg IM in a single dose | |
| Lymphogranuloma venereum | doxycycline ⁶ | 100 mg orally 2x/day for 21 days | erythromycin base 500 mg orally 4x/day for 21 days |
| Nongonococcal Urethritis (NGU) | azithromycin ¹⁰ doxycycline ⁶ | OR 1 g orally in a single dose 100 mg orally 2x/day for 7 days | erythromycin base ⁷ 500 mg orally 4x/day for 7 days erythromycin ethylsuccinate ⁸ 800 mg orally 4x/day for 7 days OR levofloxacin 500 mg 1x/day for 7 days OR ofloxacin 300 mg 2x/day for 7 days |
| Recurrent NGU ^{23,24} | metronidazole ²⁵ tinidazole PLUS azithromycin (if not used for initial episode) | OR 2 g orally in a single dose OR 2 g orally in a single dose OR 1 g orally in a single dose | |
| Pediculosis Pubis | permethrin 1% cream rinse pyrethrins with piperonyl butoxide | OR Apply to affected area, wash off after 10 minutes OR Apply to affected area, wash off after 10 minutes | malathion 0.5% lotion, applied 8-12 hrs then washed off ivermectin 250 µg/kg, orally repeated in 2 weeks |
| Pelvic Inflammatory Disease ¹³ | 1. ceftriaxone doxycycline WITH OR WITHOUT metronidazole 2. cefoxitin doxycycline WITH OR WITHOUT metronidazole 3. Other parenteral third-generation cephalosporin (e.g. ceftizoxime or cefotaxime) doxycycline WITH OR WITHOUT metronidazole | PLUS 250 mg IM in a single dose 100 mg orally 2x/day for 14 days 500 mg orally 2x/day for 14 days PLUS 2 g IM in a single dose and probenecid, 1 g, orally administered concurrently in a single dose 100 mg orally 2x/day for 14 days 500 mg orally 2x/day for 14 days PLUS 100 mg orally 2x/day for 14 days 500 mg orally 2x/day for 14 days | |
| | Alternative oral regimens are listed in CDC's 2010 STD Treatment Guidelines. | | |
| Scabies | permethrin 5% cream ivermectin | OR Apply to all areas of body from neck down, wash off after 8-14 hours OR 200 µg/kg orally, repeated in 2 weeks | lindane 1% ^{26,27} 1 oz. of lotion or 30 g of cream, applied thinly to all areas of the body from the neck down, wash off after 8 hours |
| Syphilis Primary, secondary, or early latent <1 year | benzathine penicillin G | 2.4 million units IM in a single dose | doxycycline ^{6,28} 100 mg 2x/day for 14 days tetracycline ^{6,28} 500 mg orally 4x/day for 14 days |
| Latent >1 year, latent of unknown duration | benzathine penicillin G | 2.4 million units IM in 3 doses each at 1 week intervals (7.2 million units total) | doxycycline ^{6,28} 100 mg 2x/day for 28 days tetracycline ^{6,28} 500 mg orally 4x/day for 28 days |
| Pregnancy ³ | See complete CDC guidelines. | | |
| Neurosyphilis | aqueous crystalline penicillin G | 3 to 4 million units IV every 4 hours for 10-14 days (18-24 million units/day) | procaine penicillin G 2.4 MU IM 1x daily probenecid 500 mg orally 4x/day, both for 10-14 days. |
| Congenital syphilis | aqueous crystalline penicillin G procaine penicillin G | OR 100,000-150,000 units/kg/day (50,000 units/kg/dose IV every 12 hours) during the first 7 days of life and every 8 hours thereafter for a total of 10 days 50,000 units/kg/dose IM in a single dose for 10 days | |
| Children: primary, secondary, or early latent <1 year | benzathine penicillin G | 50,000 units/kg IM in a single dose (maximum 2.4 million units) | |
| Children: latent >1 year, latent of unknown duration | benzathine penicillin G | 50,000 units/kg IM for 3 doses at 1 week intervals (maximum total 7.2 million units) | |
| Trichomoniasis | metronidazole ²⁵ tinidazole ²⁹ | OR 2 g orally in a single dose 2 g orally in a single dose | metronidazole ²⁵ 500 mg 2x/day for 7 days |

1. The recommended regimens are equally efficacious.
2. These creams are oil-based and may weaken latex condoms and diaphragms. Refer to product labeling for further information.
3. Please refer to the complete 2010 CDC Guidelines for recommended regimens.
4. Existing data do not support the use of topical agents in pregnancy.
5. Consider concurrent treatment for gonococcal infection if prevalence of gonorrhea is >5% (younger age).
6. Should not be administered during pregnancy, lactation, or to children <8 years of age.
7. If patient cannot tolerate high-dose erythromycin base schedules, change to 250 mg 4x/day for 14 days.
8. If patient cannot tolerate high-dose erythromycin ethylsuccinate schedules, change to 400 mg orally 4 times a day for 14 days.
9. Contraindicated for pregnant or lactating women.
10. Clinical experience and published studies suggest that azithromycin is safe and effective.
11. Erythromycin estolate is contraindicated during pregnancy.
12. Effectiveness of erythromycin treatment is approximately 80%; a second course of therapy may be required.
13. Patients who do not respond to oral therapy (within 72 hours) should be re-evaluated.

14. For patients with suspected sexually transmitted epididymitis, close follow-up is essential.
15. No definitive information available on prenatal exposure.
16. Treatment may be extended if healing is incomplete after 10 days of therapy.
17. Consider discontinuation of treatment after one year to assess frequency of recurrence.
18. Vaginal, cervical, urethral, and anal warts may require referral to an appropriate specialist.
19. CDC recommends that treatment for uncomplicated gonococcal infections of the cervix, urethra, and/or rectum should include dual therapy, i.e. both a cephalosporin (e.g. ceftriaxone) plus azithromycin (preferred) or doxycycline.
20. CDC recommends that cefixime in combination with azithromycin or doxycycline be used as an alternative when ceftriaxone is not available.
21. Only ceftriaxone is recommended for the treatment of pharyngeal infection. Providers should inquire about oral sexual exposure.
22. Use with caution in hyperbilirubinemic infants, especially those born prematurely.
23. MSM are unlikely to benefit from the addition of nitroimidazoles.
24. Moxifloxacin 400mg orally 1x/day for 7 days effective against *Mycoplasma genitalium*

25. Pregnant patients can be treated with 2 g single dose.
26. Contraindicated for pregnant or lactating women, or children <2 years of age.
27. Do not use after a bath, should not be used by persons who have extensive dermatitis.
28. Pregnant patients allergic to penicillin should be treated with penicillin after desensitization.
29. Randomized controlled trials comparing single 2 g doses of metronidazole and tinidazole suggest that tinidazole is equivalent to, or superior to, metronidazole in achieving parasitologic cure and resolution of symptoms.
◆ Indicates revision from the 2006 CDC Guidelines for the Treatment of Sexually Transmitted Diseases.
★ Indicates update from the 2010 CDC Guidelines for the Treatment of Sexually Transmitted Diseases; see MMWR Morb Mortal Wkly Rep. 2012 Aug 10; 61(31):590-594 for details.

