



## 2002 STD TREATMENT SUMMARY FOR ADULTS AND ADOLESCENTS

This summary of the treatment of patients with Sexually Transmitted Diseases (STDs) reflects the 2002 CDC STD Treatment Guidelines. It is intended as a source of clinical guidance, is not a comprehensive list of all effective regimens, and should not be construed as a set of inflexible rules or standards. For complete information regarding contraindications or drug interactions refer to the most recent version of the Physician's Desk Reference or another such resource. Please note that STD's in HIV-infected patients often require higher doses and longer treatment regimens. To report STD infections, request assistance with confidential notification of sexual partners of patients with syphilis or HIV infection, or to obtain additional information on the medical evaluation and management of STDs call the **New York City Department of Health and Mental Hygiene, STD Control Program at (212) 788-4423.**



NOTE: Bracketed text summarizes partner management.

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.

DISEASE		RECOMMENDED REGIMENS	ALTERNATIVE REGIMENS
<b>BACTERIAL VAGINOSIS</b> [Partner Management-Unnecessary]	Uncomplicated Infections in Adults/Adolescents	Metronidazole <sup>1</sup> 500 mg po bid x 7 d <b>OR</b> Metronidazole <sup>2</sup> gel 0.75%, 1 applicator (5g) intra-vaginally, qd x 5 d <b>OR</b> Clindamycin cream <sup>2</sup> 2%, 1 applicator (5g) intra-vaginally at bedtime x 7 d	<i>These alternate regimens have lower efficacy than the recommended ones listed to the left:</i> Metronidazole <sup>1</sup> 2 g po x 1 <b>OR</b> Clindamycin 300 mg po bid x 7 d <b>OR</b> Clindamycin ovules 100 mg intravaginally at bedtime x 3d
	Pregnant Women	Metronidazole <sup>1</sup> 250 mg po tid x 7 d <b>OR</b> Clindamycin 300 mg po bid x 7 d	
<b>CHANCROID</b> [Empiric Treatment of all sexual contacts during the 10 days preceding onset of symptoms]		Azithromycin <sup>3</sup> 1 g po x 1 <b>OR</b> Ceftriaxone 250 mg IM x 1 <b>OR</b> Ciprofloxacin <sup>4</sup> 500 mg po bid x 3 d <b>OR</b> Erythromycin base <sup>5,6</sup> 500 mg po tid x 7 d	<i>Re-examine patient in 3-7 days to ensure symptomatic and objective improvement.</i> <i>Close follow-up of response to therapy is recommended for HIV-infected persons</i>
<b>CHLAMYDIA</b> [Empiric Treatment of all sexual contacts during the 60 days preceding onset of symptoms or, if asymptomatic, date of diagnosis]	Uncomplicated Infections in Adults/Adolescents	Azithromycin <sup>3</sup> 1g po x 1 <b>OR</b> Doxycycline <sup>7</sup> 100 mg po bid x 7 d	Erythromycin base <sup>5,6</sup> 500 mg po qid x 7 d <b>OR</b> Erythromycin ethylsuccinate (EES) <sup>5,16</sup> 800 mg po qid x 7 d <b>OR</b> Ofloxacin <sup>4</sup> 300mg po bid x 7 d <b>OR</b> Levofloxacin <sup>4</sup> 500 mg po qd x 7 d
	Pregnant Women	Erythromycin base <sup>5,6</sup> 500 mg po qid x 7 d <b>OR</b> Amoxicillin 500 mg po tid x 7 d	Erythromycin base <sup>5,6</sup> 250 mg po qid x 14 d <b>OR</b> EES <sup>5,16</sup> 800 mg po qid x 7 d <b>OR</b> EES <sup>5,16</sup> 400 mg po qid x 14 d <b>OR</b> Azithromycin <sup>3</sup> 1g po x 1
<b>EPIDIDYMITIS<sup>9</sup></b> [Partner Management – See Gonorrhea]		For epididymitis likely due to Gonorrhea or Chlamydia (eg. cases in young sexually active individuals)  For epididymitis likely due to enteric organisms, patients allergic to cephalosporins or tetracyclines, and patients 35 and older.	Ceftriaxone 250 mg IM <b>PLUS</b> Doxycycline <sup>7</sup> 100 mg po bid x 10 d  <b>OR</b> Ofloxacin <sup>4,20</sup> 300 mg po bid x 10 d <b>OR</b> Levofloxacin <sup>4,20</sup> 500 mg po qd x 10 d
<b>GONORRHEA</b> [Empiric Treatment of all sexual contacts during the 60 days preceding onset of symptoms or, if asymptomatic, date of diagnosis]	Uncomplicated Infections of Cervix, Urethra, Pharynx, & Rectum in Adults/Adolescents	Cefixime <sup>10</sup> 400 mg po x 1 <b>OR</b> Ceftriaxone 125 mg IM x 1** <b>OR</b> Ciprofloxacin <sup>4,20</sup> 500 mg po x 1** <b>OR</b> Ofloxacin <sup>4,20</sup> 400 mg po x 1 <b>OR</b> Levofloxacin <sup>4,20</sup> 250 mg po x 1 **Ceftriaxone or Ciprofloxacin recommended for pharyngeal infections	Spectinomycin <sup>11</sup> 2g IM x 1 <b>OR</b> Ceftrizoxime 500 mg IM x 1 <b>OR</b> Cefotaxime 500 mg IM x 1 <b>OR</b> Cefoxitin 2 g IM with probenecid 1 g po x 1 <b>OR</b> Gatifloxacin <sup>4,20</sup> 400 mg po x 1 <b>OR</b> Lomefloxacin <sup>4,20</sup> 400 mg po x 1 <b>OR</b> Norfloxacin <sup>4,20</sup> 800 mg po x
	<i>Co-treatment for chlamydial infection is indicated</i>	<b>PLUS REGIMEN TO COVER CHLAMYDIA</b> Azithromycin <sup>3</sup> 1 g po x 1 <b>OR</b> Doxycycline <sup>7</sup> 100 mg po bid x 7 d	<b>PLUS REGIMEN TO COVER CHLAMYDIA</b> Azithromycin <sup>3</sup> 1 g po <b>OR</b> Doxycycline <sup>7</sup> 100 mg po bid x 7d
	Pregnant Women	Ceftriaxone 125 mg IM x 1 <b>OR</b> Cefixime <sup>10</sup> 400 mg po x 1	Spectinomycin <sup>11</sup> 2 g IM x 1 <b>OR</b> Ceftrizoxime or Cefotaxime 500 mg IM x 1 <b>OR</b> Cefotetan 1 g IM x 1
	<i>Co-treatment for chlamydial infection is indicated</i>	<b>PLUS REGIMEN TO COVER CHLAMYDIA</b> Erythromycin base <sup>5,6</sup> 500 mg po qid x 7 d <b>OR</b> Amoxicillin 500 mg po tid x 7 d	<b>PLUS REGIMEN TO COVER CHLAMYDIA</b> Erythromycin base <sup>5,6</sup> 500 mg po qid x 7 d <b>OR</b> Amoxicillin 500 mg po tid x 7 d
<b>GRANULOMA INGUINALE (DONOVANOSIS)</b> [Empiric Treatment of all sexual contacts during the 60 days preceding onset of symptoms]		Doxycycline <sup>7</sup> 100 mg po bid x minimum 3wks <b>OR</b> Bactrim <sup>12</sup> DS 1 tab. po bid x minimum 3wks	Ciprofloxacin <sup>4</sup> 750 mg po BID ** <b>OR</b> Erythromycin base <sup>5,6</sup> 500 mg po qid ** <b>OR</b> Azithromycin <sup>3</sup> 1g po once weekly **  **Use above regimens for at least 3 weeks.
<b>HERPES SIMPLEX (HSV)</b> [Partners since the first occurrence of lesions should be notified of their risk of exposure]	First Clinical Episode of Genital Herpes	Acyclovir <sup>13</sup> 400 mg po tid x 7-10 d <sup>14</sup> <b>OR</b> Acyclovir <sup>13</sup> 200mg po 5x/d x 7-10 d <sup>14</sup> <b>OR</b> Famciclovir <sup>13</sup> 250 mg po tid x 7-10 d <sup>14</sup> <b>OR</b> Valacyclovir <sup>13</sup> 1 g po bid x 7-10 d <sup>14</sup>	
	First Clinical Episode: of Oral or Rectal Herpes <sup>21</sup>	Traditionally, higher doses (e.g. Acyclovir <sup>13</sup> 400 mg po 5x/d x10d ) have been used for these forms of HSV, although comparative studies have yet to confirm their necessity. <i>Valacyclovir and famciclovir probably are also effective for acute HSV proctitis and oral infection, but clinical experience is limited.</i>	
	Recurrent Episode	Acyclovir <sup>13</sup> 400 mg po tid x 5 d <b>OR</b> Acyclovir <sup>13</sup> 200 mg po 5x/d x 5 d <b>OR</b> Acyclovir <sup>13</sup> 800 mg po bid x 5 d <b>OR</b> Famciclovir <sup>13</sup> 125 mg bid x 5 d <b>OR</b> Valacyclovir <sup>13</sup> 500 mg po bid x 3-5 d <b>OR</b> Valacyclovir <sup>13</sup> 1 g po qd x 5d	<b>IN HIV-INFECTED INDIVIDUALS</b> Acyclovir <sup>13</sup> 400 mg po tid x 5-10 d <b>OR</b> Acyclovir <sup>13</sup> 200 mg po 5x/d x 5-10 d <b>OR</b> Famciclovir <sup>13</sup> 500 mg po bid x 5-10 d <b>OR</b> Valacyclovir <sup>13</sup> 1 g po bid x 5-10d
	Daily Suppressive Therapy <sup>8</sup>	Acyclovir <sup>13</sup> 400 mg po bid <b>OR</b> Famciclovir <sup>13</sup> 250 mg po bid <b>OR</b> Valacyclovir <sup>13, 22</sup> 500 mg po qd *** <b>OR</b> Valacyclovir <sup>13, 22</sup> 1 g po qd *** May be less effective in patients with ≥10 recurrences per year	<b>IN HIV-INFECTED INDIVIDUALS</b> Acyclovir <sup>13</sup> 400-800 mg po bid - tid <b>OR</b> Famciclovir <sup>13</sup> 500 mg po bid <b>OR</b> Valacyclovir <sup>13</sup> 500 mg po bid

DISEASE		RECOMMENDED REGIMENS	ALTERNATIVE REGIMENS
<b>LYMPHO-GRANULOMA VENEREUM</b> [Empiric Treatment of all sexual contacts during the 30 days preceding onset of symptoms]		Doxycycline <sup>7</sup> 100 mg po bid x 21 d	Erythromycin base <sup>5,6</sup> 500 mg po qid x 21 d
<b>MUCOPURULENT CERVICITIS</b>		Treat for Chlamydia +/- Gonorrhea (refer to full CDC Treatment Guidelines for more details)	
<b>NONGONOCOCCAL URETHRITIS (NGU)<sup>15</sup></b> [Partner Management – See Chlamydia]		Azithromycin <sup>3</sup> 1 g po x 1 OR Doxycycline <sup>7</sup> 100 mg po bid x 7 d	Erythromycin base <sup>5,6</sup> 500 mg po qid x 7 d OR EES <sup>5,16</sup> 800 mg po qid x 7 d OR Ofloxacin <sup>4</sup> 300 mg po bid x 7d OR Levofloxacin <sup>4</sup> 500 mg po qd x 7d
<b>PEDICULOSIS PUBIS (LICE)</b> [Empirically treat sexual partners within the 1 month prior to symptom onset]		Permethrin <sup>17,12</sup> 1% creme rinse applied to affected areas, <b>washed off after 10 minutes</b> OR Lindane <sup>17,18</sup> 1% shampoo applied to affected areas, <b>washed off after 4 minutes</b> OR Pyrethrins with Piperonyl Butoxide applied to affected areas, <b>washed off after 10 minutes</b>	
<b>PELVIC INFLAMMATORY DISEASE (PID)<sup>9</sup></b> [Partner Management-See Gonorrhea. Partners should be empirically treated for both GC & Chlamydia]	<b>OUTPATIENT THERAPIES</b> [Pregnant Women should be hospitalized for parenteral therapy]	<b>REGIMEN A</b> Ofloxacin <sup>4,20</sup> 400 mg po bid x 14 days OR Levofloxacin <sup>4,20</sup> 500 mg po qd x 14 days +/- Metronidazole <sup>1</sup> 500 mg po bid x 14 days	<b>REGIMEN B</b> <b>One of the Following:</b> Ceftriaxone 250 mg IM x 1 Cefoxitin 2 g IM x 1 <b>WITH</b> Probenecid 1g po x 1 Other third-generation Cephalosporin (e.g. Ceftrizoxime or Cefotaxime) <b>PLUS</b> Doxycycline <sup>7</sup> 100 mg po bid x 14 d <b>+/-</b> Metronidazole <sup>1</sup> 500 mg po bid x 14 days
	<b>PARENTERAL THERAPIES</b>	Refer to Full CDC Treatment Guidelines or call the NYC Department of Health and Mental Hygiene STD Control Program @ 212-788-4423 OR visit <a href="http://www.nyc.gov/health/std">www.nyc.gov/health/std</a>	
<b>PROCTITIS, PROCTOCOLITIS, ENTERITIS</b>		Pending results of laboratory tests, treat empirically for both gonorrhea and chlamydia	
<b>SCABIES</b> [All sexual, close personal or household contacts should be evaluated for possible treatment]		Permethrin 5% cream <sup>17,12</sup> applied to all areas of body from neck down and <b>washed off after 8-14 hrs</b>	Lindane <sup>17,18</sup> 1% 1oz lotion or 30g cream applied to all areas of body from neck down washed off after 8 hrs OR Ivermectin 200 ug/kg po, repeated in 2 wks. <b>NOT an FDA Approved Medication</b>
<b>SYPHILIS IN ADULTS-UNCOMPLICATED</b> [Partner Management <sup>19</sup> ]  For treatment of infants, children and pregnant women – refer to full CDC Treatment Guidelines	Primary, Secondary, and Early Latent (≤ 1yr)	Benzathine penicillin G 2.4 Million units IM x 1 <sup>23</sup>	<b>Penicillin-allergic patients</b> Doxycycline <sup>7</sup> 100 mg po bid x 14 days OR Tetracycline <sup>7</sup> 500 mg po qid x 14 days
	Late Latent (>1 year), Tertiary, or Latent of Unknown Duration	Benzathine penicillin G 7.2 Million units total, administered as 3 doses of 2.4 million U IM at 1-week intervals.	<b>Penicillin-allergic patients</b> Doxycycline <sup>7</sup> 100 mg po bid x 28 days OR Tetracycline <sup>7</sup> 500 mg po qid x 28 days
	Neurosyphilis <sup>24</sup>	Aqueous crystalline penicillin G 18-24 million U daily, administered as 3-4 million units IV q 4 hrs x 10-14 d	Procaine Penicillin 2.4 million U, IM qd x 10-14 d <b>PLUS</b> Probenecid 500 mg po qid x 10-14 d
<b>SYPHILIS - IN PERSONS WITH HIV INFECTION</b> [Partner Management <sup>19</sup> ]	Primary, Secondary and Early Latent	Benzathine penicillin G 2.4 million units IM <i>Some experts recommend additional weekly doses</i>	<b>None</b> [Penicillin Allergic Patients should undergo desensitization]
	Late Latent, Tertiary, and Syphilis of Undetermined Age with Normal CSF	Benzathine penicillin G 7.2 million units total, administered as 3 doses of 2.4 million U IM at 1-week intervals	<b>None</b> [Penicillin Allergic Patients should undergo desensitization]
	Neurosyphilis <sup>24</sup>	Aqueous crystalline penicillin G 18-24 million U daily, administered as 3-4 million units IV q 4 hrs, or continuous infusion, x 10-14 d	Procaine Penicillin 2.4 million U, IM qd x 10-14 d <b>PLUS</b> Probenecid 500 mg po qid x 10-14 d
<b>SYPHILIS – IN INFANTS, CHILDREN, OR DURING PREGNANCY</b>		Refer to Full CDC Treatment Guidelines or call the NYC Department of Health and Mental Hygiene STD Control Program @ 212-788-4423 OR visit <a href="http://www.nyc.gov/health/std">www.nyc.gov/health/std</a>	
<b>TRICHOMONIASIS</b> [Partner Management - See Gonorrhea]		Mentronidazole <sup>1</sup> 2g po x 1	Mentronidazole <sup>1</sup> 500 mg po bid x 7 d
<b>WARTS/ CONDYLOMA (HUMAN PAPILLOMAVIRUS)</b> [Sex partners may benefit from examination to assess the presence of genital warts and other STDs. Most sex partners probably are already infected subclinically. No practical screening tests for subclinical infection are available.]	External Genital/ Perianal Warts	Podofilox <sup>13</sup> 0.5% solution or gel applied by cotton swab to visible warts twice daily for 3 days, followed by 4 days of no therapy. This cycle may be repeated as necessary for a total of 4 cycles. Total wart area treated should not exceed 10cm <sup>2</sup> , and a total podofilox used should not exceed 0.5mL per day. OR Imiquimod <sup>13</sup> 5% cream applied by finger at bedtime, three times a week for as long as 16 weeks. Treatment area should be washed with mild soap & water 6-10 hours after application. <b>For a discussion of provider administered regimens, refer to the Full CDC Treatment Guidelines.</b>	
	Vaginal, Cervical, Urethral, Anal, or Oral Warts	<b>Provider administered regimens recommended – Refer to the Full CDC Treatment Guidelines.</b> May require consultation with a specialist	

- Contraindicated during 1st trimester of pregnancy and in nursing women; use during the 2nd & 3rd trimesters should be reserved for patients who have failed other regimens. Patients should avoid consuming alcohol during treatment and 24 hours thereafter.
- Many creams/gels are petroleum-based and may weaken latex condoms and diaphragms. Refer to product labeling for further information.
- Safety has not been determined for pregnant or nursing women and children <16 years of age.
- Contraindicated in pregnant or nursing women and children <18 years of age.
- Given lower cure rate associated with erythromycin regimens, consider test of cure 3 weeks after completion of therapy.
- Erythromycin Estolate is contraindicated during pregnancy.
- Contraindicated in pregnant or nursing women, and children < 8 years of age.
- Discontinue suppressive treatment after one year to assess frequency of recurrence.
- Close follow-up is essential.
- Not recommended for treatment of pharyngeal GC, or for patients at risk for concurrent pharyngeal infection.
- For patients who cannot tolerate cephalosporins or quinolones; unreliable against pharyngeal gonococcal infection.
- Contraindicated in pregnant or nursing women, and infants <2 months of age.
- Safety during pregnancy not established.
- Treatment may be extended if healing is incomplete after 10 days of therapy.
- Treatment for persistent/recurrent NGU should include metronidazole 2 g po x 1.

- EES = Erythromycin Ethylsuccinate
- Do not use after a bath/shower or in persons with extensive dermatitis.
- Contraindicated in pregnant or nursing women and children <2 years of age.
- Primary, Secondary, Early Latent Syphilis:** Partners ≤ 90 days from case diagnosis should be screened and treated presumptively; those >90 days should be treated based on results of screening. Any patient whose compliance with follow up for results and treatment are uncertain should be treated presumptively.  
**Late Latent Syphilis:** Long-standing sex partners and children of the treated case should be evaluated/screened and treated appropriately.
- Due to drug resistant N. gonorrhoea, quinolones should not be used for infections that may have been acquired in Asia, Pacific Islnds and Hawaii. Quinolone-resistance has also increased in California, such that treatment of cases originating from this State with a quinolone may be inadvisable.
- It is unclear whether these infections require higher doses of antiviral drugs (ie. 400mg 5 x/day) than used for genital herpes (ie 200mg 5x/day).
- Valacyclovir 500 mg once a day appears less effective than other valacyclovir or acyclovir regimens in patients with >= 10 recurrences per year.
- Some experts recommend an additional dose 1 week following the first for patients treated during pregnancy.
- Some experts administer 2.4 mU Benzathine penicillin G weekly x3 after above treatment is completed.