CALIFORNIA STD TREATMENT GUIDELINES TABLE FOR ADULTS & ADOLESCENTS 2015

These guidelines reflect recent updates in the 2015 CDC STD Treatment Guidelines for both HIV-uninfected and HIV-infected adults and adolescents, treatments that differ for HIV-infected populations are designated by a red ribbon. Call the local health department for assistance with confidential notification of sexual partners of patients with syphilis, gonorrhea, chlamydia or HIV infection. For STD clinical management consultation, call (510-620-3400) or submit your question online to the STD Clinical Consultation Network at www.stdccn.org.

DISEASE RECOMMENDED REGIMENS DOSE/ROUTE ALTERNATIVE REGIMENS: To be used if medical contra-indication to recommended regimen.

CHLAMYDIA (CT)

Uncomplicated Genital/Rectal/Pharyngeal infections

- Azithromycin or Doxycycline

1 g po
100 mg po bid x 7 d

- Erythromycin base 500 mg po qd x 7 d or
- Erythromycin ethylsuccinate 800 mg po qd x 7 d or
- Levofloxacin® 500 mg po qd x 7 d or
- Ofloxacin® 300 mg po bid x 7 d or
- Doxycycline (delayed release) 200 mg po qd x 7 d

Pregnant Women

- Azithromycin or Doxycycline

1 g po

- Amoxicillin 500 mg po 4x7 d or
- Erythromycin base 500 mg po qd x 7 d or
- Erythromycin ethylsuccinate 800 mg po qd x 7 d or
- Erythromycin base 800 mg po qd x 7 d or
- Erythromycin ethylsuccinate 400 mg po qd x 14 d

Pharyngeal Infections

- Azithromycin or Doxycycline

250 mg IM
1 g po

If cephalosporin or any other macrolide regimen (e.g., erythromycin, levofloxacin, orOfloxacin®) is chosen, limited data exist on their efficacy. See footnotes.

Pregnant Women

- Azithromycin or Doxycycline

250 mg IM
1 g po

Ofloxacin® 400 mg po PLUS
- Azithromycin 1 g po
- Amoxicillin 500 mg po bid x 7 d

GONOCOCCAL ULCER (GU): Dual therapy with ceftriaxone 250 mg IM PLUS azithromycin 1 g po is recommended for all patients with gonorrhea regardless of chlamydia test results. Such dual therapy should be simultaneous and by directly observed therapy. Azithromycin is preferred second antimicrobial if allergy to azithromycin, can use doxycycline 100 mg po bid x 7 days.

Uncomplicated Genital/Rectal Infections

- Azithromycin or Doxycycline

Dual therapy with
Ceftriaxone PLUS
Azithromycin

250 mg IM
1 g po

Dual therapy with
Ceftriaxone 2 g po PLUS
- Azithromycin 1 g po or
- Doxycycline 100 mg po bid x 7 d

Cephalosporin allergy or IgE mediated penicillin allergy
- Ceftriaxone 250 mg IM PLUS Azithromycin 2 g po or
- Gentamicin® 240 mg IM PLUS Azithromycin 2 g po

Pelvic Inflammatory Disease

Parenteral
- Either Cefotaxime or Ceftriaxone plus Doxycycline or
- Ceftriaxone or Gentamicin

IM/Oral
- Either Ceftriaxone or Cefotaxime with Probenecid plus Doxycycline plus
- Metronidazole if BV is present or cannot be ruled out

Parenteral
- Cefixime 200 mg IV or IM q 12 hr
- Ceftriaxone 1 g po

Oral
- Ofloxacin® 400 mg po qd x 14 d or
- Levofloxacin® 400 mg po qd x 14 d or
- Moxifloxacin® 400 mg po qd x 14 d

Ceftriaxone 250 mg IM in a single dose plus Azithromycin 1 g po once a week for 2 weeks

- Metronidazole 500 mg po bid x 14 d if BV is present or cannot be ruled out

CERVICITIS

- Azithromycin or Doxycycline

1 g po

- Metronidazole 500 mg po bid x 7 d

NONGONOCOCCAL URETHRITIS

- Azithromycin or Doxycycline

1 g po

- Erythromycin base 500 mg po qid x 7 d or
- Erythromycin ethylsuccinate 800 mg po qd x 7 d or
- Levofloxacin® 500 mg po qd x 7 d or
- Ofloxacin® 300 mg po bid x 7 d

EPIDIDYMITIS

Likely due to GC or CT

- Ceftriaxone or Doxycycline

250 mg IM
100 mg po bid x 10 d

Likely due to GC, CT or enteric organisms (history of anal invasive sex)

- Ceftriaxone or Levofloxacin or
- Ofloxacin

250 mg IM
500 mg po qd x 10 d
300 mg po bid x 10 d
500 mg po qd x 10 d
300 mg po bid x 10 d

CHANCROID

- Azithromycin or Doxycycline or
- Ceftriaxone or Ciprofloxacin or
- Erythromycin base

1 g po

- Ceftriaxone

250 mg IM
500 mg po bid x 3 d
500 mg po bid x 7 d

- Ciprofloxacin

500 mg po qd x 7 d

Lymphogranuloma Venereum

- Doxycycline

100 mg po bid x 21 d

- Erythromycin base 500 mg po qd x 21 d

TRICHOMONIASIS

Adults/Adolescents

- Metronidazole or Tinidazole

2 g po
2 g po

- Metronidazole 500 mg po bid x 7 d

Pregnant Women

- Metronidazole

2 g po

- Metronidazole 500 mg po bid x 7 d

HIV-Infected Women

- Metronidazole

2 g po

- Metronidazole 500 mg po bid x 7 d

1 Annual screening is recommended for women aged < 25 years. Nucleic acid amplification tests (NAATs) are recommended. All patients should be re-tested 3 months after treatment for CT or GC.

2 If cephalosporin allergy or IgE mediated penicillin allergy, can use doxycycline 100 mg po bid x 7 days.

3 For consultation call (510-620-3400) or contact the STD Clinical Consultation Network at www.stdccn.org.

4 Oral cephalosporins give lower and less sustained bactericidal levels than ceftriaxone 250 mg. Limited efficacy for treating penicillin-resistant GC. Cefixime should be only used when cephalosporin is not available.

5 Dual therapy with gentamicin 300 mg po plus azithromycin 2 g po or gentamicin 240 mg IM plus azithromycin 2 g po are potential alternatives. ID specialist consultation may be prudent. Azithromycin monotherapy is no longer recommended due to resistance concerns and treatment failure reports. Pharyngocervical GC patients treated with an alternative regimen should have a test of cure with culture or NAAT 14 days after treatment.

6 Testing for gonorrhoea and chlamydia is recommended because a specific diagnosis may improve compliance and partner management and because these infections are reportable by state law.

7 Evaluation for bacterial vaginosis. If present or cannot be ruled out, use metronidazole. If paternal treatment is selected, discontinue 24-48 hours after patient improves clinically and continue with oral therapy for a total of 24 days.

8 In the setting of allergy to cephalosporins, fluoroquinolones can be considered for PID if the risk of GC is low, a NAAT test for GC is performed, and follow-up of the patient can be assured. If GC is documented, the patient should be re-treated based on antimicrobial susceptibility test results (if available). If antimicrobial susceptibility testing reveals fluoroquinolone resistance or if testing is unavailable then consultation with ID specialist is recommended for treatment options.

9 If patient lives in community with high GC prevalence, or has risk factors (e.g. age <25 years, new partner, partner with concurrent sex partners, or sex partner with a STD), consider empiric treatment for GC.

10 If, Mycoplasma genitalium is the most common cause of recurrent/re disruptive urethritis. Men who fail a regimen of azithromycin for urethritis should be treated with moxifloxacin 400 mg orally for 7 days.

11 Gonorrhea should be ruled out prior to starting a fluoroquinolone-based regimen.

12 For suspected drug-resistant trichomoniasis, rule out in-office treatment. See 2015 CDC Guidelines, Persistent or Recurrent Trichomoniasis section, for other treatment options, and evaluate for metronidazole-resistant T. vaginalis. For consultation call (510-620-3400) or contact the STD Clinical Consultation Network at www.stdccn.org.

13 All women should be retested for trichomoniasis 3 months after treatment.

14 Safety in pregnancy has not been established, avoid during pregnancy. When using tinidazole, breastfeeding should be deferred for 72 hours after 2 g dose.
### BACTERIAL VAGINOSIS

**Adult/Adolescents**
- Metronidazole or
- Metronidazole gel or
- Clindamycin cream<sup>27</sup>

**Pregnant Women**
- Metronidazole or
- Metronidazole gel or
- Clindamycin cream<sup>27</sup>

**RECOMMENDED REGIMENS**
<table>
<thead>
<tr>
<th>DISEASE</th>
<th>DOSE/ROUTE</th>
<th>ALTERNATIVE REGIMENS: To be used if medical contraindication to recommended regimen</th>
</tr>
</thead>
</table>

### ANOGENITAL WARTS

**External Genital/Fresh Fissure Warts**
- Patient-Administered
  - Imiquimod<sup>26,28</sup> 5% cream or
  - Podophyllin resin<sup>22</sup> 80%-90% cream or
  - Bichloroacetic acid (TCA) 80%-90% or
  - Surgical removal

**Alternative Regimen – Provider Administered**
- Podophyllin resin<sup>22</sup> 80%-90% cream or
- Topical cidofovir

**Mucosal Genital Warts<sup>26</sup>**
- Cryotherapy or
- Surgical removal or
- TCA or BCA 80%-90%

**RECOMMENDED REGIMENS**
<table>
<thead>
<tr>
<th>DISEASE</th>
<th>DOSE/ROUTE</th>
<th>ALTERNATIVE REGIMENS: To be used if medical contraindication to recommended regimen</th>
</tr>
</thead>
</table>

### ANOGENITAL HERPES<sup>22</sup>

**First Clinical Episode of Anogenital Herpes**
- Acyclovir or
- Valacyclovir or
- Famciclovir

**Established Infection Suppressive Therapy<sup>22</sup>**
- Acyclovir or
- Valacyclovir or
- Famciclovir<sup>22</sup>

**Suppressive Therapy for Pregnant Women (start at 16 weeks gestation)**
- Acyclovir or
- Valacyclovir or
- Famciclovir

**Episodic Therapy for Recurrent Episodes**
- Acyclovir or
- Valacyclovir or
- Famciclovir

**HIV Co-infected<sup>22</sup>**

**Suppressive Therapy<sup>22</sup>**
- Acyclovir or
- Valacyclovir or
- Famciclovir<sup>22</sup>

**Episodic Therapy for Recurrent Episodes**
- Acyclovir or
- Valacyclovir or
- Famciclovir

**SYNONYMS**

**Primary, Secondary, and Early Latent**
- Benzathine penicillin G

**Late Latent**
- Benzathine penicillin G

**Neurophils and Ocular Syphilis<sup>22</sup>**
- Aquous crystalline penicillin G

**Pregnant Women<sup>22</sup>**

**Primary, Secondary, and Early Latent**
- Benzathine penicillin G

**Late Latent**
- Benzathine penicillin G

**Neurophils and Ocular Syphilis<sup>22</sup>**
- Aquous crystalline penicillin G

<sup>16</sup> Safety in pregnancy has not been established; avoid during pregnancy. When using triamcinolone, breastfeeding should be deferred for 72 hours after 2 g dose.

<sup>17</sup> May weaken latex condoms and contraceptive diaphragms. Patients should follow directions on package insert carefully regarding whether to wash area after treatment (e.g. imiquimod) versus leaving product on the affected area (e.g. sinecatechins).

<sup>18</sup> Limited human data on imiquimod use in pregnancy; animal data suggest low risk.

<sup>19</sup> May weaken latex condoms and contraceptive diaphragms. Patients should follow directions on package insert carefully regarding whether to wash area after treatment (e.g. imiquimod) versus leaving product on the affected area (e.g. sinecatechins).

<sup>20</sup> Patients should follow directions on package insert carefully regarding whether to wash area after treatment (e.g. imiquimod) versus leaving product on the affected area (e.g. sinecatechins).

<sup>21</sup> Aqueous crystalline penicillin G (generic name) is the recommended treatment for syphilis not involving the central nervous system and is available in only one long-acting formulation, Bicillin® LA (the trade name), which contains only benzathine penicillin G. Other combination products, such as Bicillin® C-R, contain both long- and short-acting penicillins and are not effective for treating syphilis.

<sup>22</sup> Persons with HIV infection should be treated according to the same stage-specific recommendations for primary, secondary, and latent syphilis as used for HIV-negative persons. Available data demonstrate that additional doses of benzathine penicillin G, procaine, or other antibiotics in early syphilis do not result in enhanced efficacy, regardless of whether or not the patient is HIV-infected.

<sup>23</sup> Alternates should be used only for penicillin-allergic patients because efficacy of these therapies has not been established. Compliance with some of these regimens is difficult, and close follow-up is essential. If compliance or follow-up cannot be ensured, the patient should be desensitized and treated with benzathine penicillin.

<sup>24</sup> Some specialists recommend 2.4 million units of benzathine penicillin G once weekly for up to 3 weeks after completion of neurosyphilis treatment.

<sup>25</sup> Pregnant women allergic to penicillin should be desensitized and treated with penicillin. There are no alternatives. Pregnant women who miss any dose of therapy must repeat the full course of treatment.