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.stdcon.org.

DISEASE

CHLAMYDIA (CT)

Genital/Rectal/Pharyngeal infections1

- Azithromycin or
- Doxycycline2

1 g po
100 mg po bid x 7 d

- Ceftriaxone 250 mg IM

1 g po

Pregnant Women3

- Azithromycin

1 g po

GONORRHEA (GC): Dual therapy with cefixime 250 mg IM PLUS azithromycin 1 g po is recommended for all patients with gonorrhea regardless of chlamydia test results. 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.

GONORRHEA (GC): Dual therapy with gemifloxacin 320 mg po PLUS azithromycin 1 g po or Doxycycline 100 mg po bid x 7 d

Pharyngeal Infections2

Dual therapy with

- Cefixime

PLUS

- Azithromycin

250 mg IM

1 g po

Pregnant Women3

Dual therapy with

- Cefixime

PLUS

- Azithromycin

250 mg IM

1 g po

PELVIC INFLAMMATORY DISEASE (PID)

(Etiologies: CT, GC, amebicids, possibly M. genitalium, others)

- Azithromycin or
- Doxycycline

1 g po
100 mg po bid x 7 d

- Cefixime 250 mg IM

1 g po

- Azithromycin 1 g po if cephalosporin or azithromycin allergy, or if medically contraindicated

CERVICITIS3, 4, 5

(Etiologies: CT, GC, T. vaginalis, HIV- possibly M. genitalium)

- Azithromycin or
- Doxycycline

1 g po
100 mg po bid x 7 d

- Cefixime 250 mg IM

1 g po

- Azithromycin 1 g po or
- Doxycycline 100 mg po bid x 7 d

NONGONOCOCCAL URETHRITIS (NGU)3

- Azithromycin or
- Doxycycline

1 g po
100 mg po bid x 7 d

- Cefixime 250 mg IM

1 g po

- Azithromycin 1 g po or
- Doxycycline 100 mg po bid x 7 d

RECURRENT/PERSISTENT NGU (Etiologies: M. genitalium T. vaginalis, other bacteria2)

- Minocycline plus
- Doxycycline2 or
- Tinidazole

400 mg po bid x 7 d
2 g po x 7 d

- Azithromycin 1 g po

- Cefixime 250 mg IM

1 g po

- Doxycycline2

100 mg po bid x 7 d

LYMPHOGRAVULOMA VENEREAE

- Azithromycin

100 mg po bid x 21 d

- Cefixime 250 mg IM

1 g po

TRICHOMEONIASIS4, 5

Adults/Adolescents

- Metronidazole or
- Tinidazole

2 g po
2 g po

- Azithromycin 1 g po

Pregnant Women

- Metronidazole

4 g po

- Azithromycin 1 g po

HIV-infected Women

- Metronidazole

500 mg po bid x 7 d

- Azithromycin 1 g po

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

2. Cephalosporins are the treatment of choice for PID. Patients with PID who are allergic to cephalosporins should be treated with azithromycin 1 g po, cefixime 250 mg IM or both. Use tinidazole in patients who cannot be treated with azithromycin or cefixime. Doxycycline should be used only in cases of apparent cephalosporin allergy. Consult with specialist, see footnotes.

3. Every effort should be made to use a recommended regimen. Test-of-cure follow-up (preferably by NAAT) 3-4 weeks after completion of therapy is recommended in pregnancy. In case of allergy to both alternative and recommended regimens, consult with the CA STD Control Branch at 510-620-3400 or the STD Clinical Consultation Network at www.stdcon.org.

4. Etiologies: T. vaginalis, C. trachomatis, possibly M. genitalium, others)

5. Women with malignancy or immunosuppression are at increased risk of severe pelvic inflammatory disease. Non-gonococcal pelvic infections may benefit from a longer duration of therapy. Consult with specialist, see footnotes.
## Bacterial Vaginosis

<table>
<thead>
<tr>
<th>Disease</th>
<th>Recommended Regimens</th>
<th>Dose/Route</th>
<th>Alternative Regimens: To be used if medical contraindication to recommended regimen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adults/Adolescents</td>
<td>- Metronidazole or Metronidazole gel or Clindamycin cream&lt;sup&gt;27&lt;/sup&gt;</td>
<td>500 mg po bid x 7 d 0.75%, one full applicator (5 g) intravaginally qd x 5 d 2%, one full applicator (5 g) intravaginally qhs x 7 d</td>
<td>- Tinidazole&lt;sup&gt;2&lt;/sup&gt; 2 g po qd x 2 d or Tinidazole&lt;sup&gt;1&lt;/sup&gt; 1 g po qd x 5 d or Clindamycin 360 mg po bid x 7 d or Clindamycin oint&lt;sup&gt;2&lt;/sup&gt; 100 mg intravaginally qhs x 3 d</td>
</tr>
<tr>
<td>Pregnant Women</td>
<td>- Metronidazole or Metronidazole gel or Clindamycin cream&lt;sup&gt;27&lt;/sup&gt;</td>
<td>500 mg po bid x 7 d 0.75%, one full applicator (5 g) intravaginally qd x 5 d 2%, one full applicator (5 g) intravaginally qhs x 7 d</td>
<td>- Clindamycin 360 mg po bid x 7 d or Clindamycin oint&lt;sup&gt;2&lt;/sup&gt; 100 mg intravaginally qhs x 3 d</td>
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## Anogenital Warts

### External Genital/Perianal Warts

- **Patient-Administered**
  - Inimiquimod<sup>15</sup>,<sup>16</sup> 5% cream or Podofilox<sup>15</sup> 0.5% solution or Sinecatechins<sup>11</sup> 15% ointment
  - **Provider-Administered**
    - Cryotherapy or Trichloroacetic acid (TCA) 80%-90% or Bichloroacetic acid (BAC) 80%-90% or Surgical removal

- Topically qhs 3 times/wk up to 16 wkks
- Topically qhs up to 16 wkks

### Mucosal Genital Warts<sup>25</sup>

- Cryotherapy or Surgical removal or TCA or BAC 80%-90%
- Vaginal, urethral meatus, cervical, anal
- Vaginal, urethral meatus, cervical, anal
- Vaginal, cervical, anal

## Anogenital Herpes<sup>14</sup>

### First Clinical Episode of Anogenital Herpes

- Acyclovir or Aciclovir or Valacyclovir or Famciclovir
- 400 mg po bid x 10-14 d
- 200 mg po 5x/day x 7-10 d
- 1 g po bid x 7-10 d
- 250 mg po bid x 7-10 d

### Established Infection

- Acyclovir or Valacyclovir or Famciclovir<sup>2</sup>
- 400 mg po bid
- 500 mg po qd
- 500 mg po bid

### Suppressive Therapy for Pregnant Women (start at 36 weeks gestation)

- Acyclovir or Aciclovir or Valacyclovir or Famciclovir
- 400 mg po qid x 14 d
- 200 mg po bid x 3 d
- 500 mg po bid x 3 d

### Episodic Therapy for Recurrent Episodes

- Acyclovir or Aciclovir or Famciclovir
- 400-800 mg po bid or tid
- 500 mg po bid
- 500 mg po bid

### HIV Co-Infected<sup>20</sup>

- Acyclovir or Aciclovir or Valacyclovir or Famciclovir
- 200 mg po 5x/day x 7-10 d
- 1 g po bid x 5-10 d
- 500 mg po bid x 5-10 d

## Syphilis<sup>21</sup>

### Primary, Secondary, and Early Latent

- Benzathine penicillin G
- 2.4 million units IM

### Late Latent

- Benzathine penicillin G
- 7.2 million units, administered as 3 doses of 2.4 million units IM each, at 1-week intervals

### Neurosyphilis and Ocular Syphilis<sup>22</sup>

- Aqueous crystalline penicillin G
- 18-24 million units daily, administered as 3-4 million units IV q 4 hrs x 10-14 d

### Pregnant Women<sup>23</sup> NOTE: Pregnant women who miss any dose of therapy must repeat full course of treatment.

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<tr>
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<td>- Benzathine penicillin G</td>
<td>2.4 million units IM</td>
<td>None</td>
</tr>
<tr>
<td>Late Latent</td>
<td>- Benzathine penicillin G</td>
<td>7.2 million units, administered as 3 doses of 2.4 million units IM each, at 1-week intervals</td>
<td>None</td>
</tr>
<tr>
<td>Neurosyphilis and Ocular Syphilis&lt;sup&gt;22&lt;/sup&gt;</td>
<td>- Aqueous crystalline penicillin G</td>
<td>18-24 million units daily, administered as 3-4 million units IV q 4 hrs x 10-14 d</td>
<td>None</td>
</tr>
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### TCA or BCA 80%-90%
- Trichloroacetic acid (TCA) 80%-90% or Benzyl alcohol (BCA) 80%-90%
- Surgical removal

### Cryotherapy
- Topically bid x 3 followed by 4 no tx for up to 4 cycles

### Surgical removal
- 250 mg po bid x 5-10 d

### Imiquimod<sup>17</sup>,<sup>18</sup>
- Topical cidofovir
- or
- Intralesional interferon
- or
- Photodynamic therapy or
- Topical cidex

**Notes:**
- Safety in pregnancy has not been established; avoid during pregnancy. When using this drug, breastfeeding should be deferred for 72 hours after 2 g dose.
- 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).
- Limited human data on imiquimod use in pregnancy; animal data suggest low risk.
- Podophyllin resin is now an alternative rather than recommended regimen; severe toxicity has been reported.
- Cervical and intra-anal warts should be managed in consultation with specialist.
- Counseling about natural history, asymptomatic shedding, and sexual transmission is an essential component of herpes management.
- The goal of suppressive therapy is to reduce recurrent symptomatic episodes and/or to reduce sexual transmission. Famciclovir is somewhat less effective for suppression of viral shedding.
- If HSV lesions persist or recur during antiviral treatment, drug resistance should be suspected. Obtaining a viral isolate for sensitivity testing and consulting with an infectious disease expert is recommended.
- Benzathine 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.
- 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, amoxicillin, or other antibiotics in early syphilis do not result in enhanced efficacy, regardless of the stage of syphilis.
- 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.
- Some specialists recommend 2.4 million units of benzathine penicillin G once weekly for up to 3 weeks after completion of neurosyphilis treatment.
- Pregnant women allergic to penicillin should be desensitized and treated with penicillin. There are no alternatives.

**Updated November 2015**