The Commonwealth of Massachusetts
Executive Office of Health and Human Services
Department of Public Health
William A. Hinton State Laboratory Institute
305 South Street, Jamaica Plain, MA 02130

Bureau of Infectious Disease

CLINICAL ADVISORY

To: Massachusetts Clinicians
From: Barbara Coughlin, RN, Nurse Clinical Advisor, Division of STD Prevention
Katherine Hsu, MD, MPH, Medical Director, Division of STD Prevention
Date: June 24, 2015
Re: Update to Recommended Treatment and Management of Gonococcal Infections

To improve treatment efficacy, and potentially slow emergence and spread of cephalosporin resistance, dual therapy continues to be recommended for treatment of most gonococcal infections. A detailed discussion of these updated recommendations is available in the CDC Sexually Transmitted Diseases Treatment Guidelines, 2015 which can be found at www.cdc.gov/std/tg2015/.

The table below is a summary of treatment recommendations from CDC and MDPH. Doxycycline has been demoted to alternative for dual therapy, because of the convenience and compliance advantages of single-dose azithromycin and the substantially higher prevalence of resistance to tetracycline (similar to doxycycline) among Gonococcal Isolate Surveillance Project (GISP) isolates, particularly in strains with elevated cefixime MICs.

<table>
<thead>
<tr>
<th>GONOCOCCAL INFECTIONS</th>
<th>RECOMMENDED TREATMENT</th>
<th>ALTERNATIVES (use only if recommended regimens are contraindicated)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ADULTS, ADOLESCENTS AND CHILDREN ≥45 kg</strong>&lt;br&gt;UROGENITAL, PHARYNGEAL, RECTAL</td>
<td>Ceftriaxone 250 mg IM once&lt;br&gt;PLUS&lt;br&gt;Azithromycin 1 g orally once&lt;br&gt;&lt;br&gt;Note: Use of any alternative regimens for pharyngeal gonorrhea should be followed by a test-of-cure 14 days after treatment.</td>
<td>For azithromycin allergy:&lt;br&gt;- Ceftriaxone 250 mg IM once&lt;br&gt;- Doxycycline 100 mg orally 2 times a day for 7 days&lt;br&gt;For urogenital or rectal infections ONLY, and ONLY if ceftriaxone is not available:&lt;br&gt;- Cefixime 400mg orally once&lt;br&gt;- Azithromycin 1 g orally once&lt;br&gt;- OR in case of azithromycin allergy&lt;br&gt;- Doxycycline 100 mg orally 2 times a day for 7 days&lt;br&gt;For cephalosporin allergy:&lt;br&gt;- Gemifloxacin 320mg orally PLUS azithromycin 2g orally once&lt;br&gt;- Gentamicin 240mg IM PLUS azithromycin 2g orally once</td>
</tr>
<tr>
<td><strong>ADULTS AND ADOLESCENTS</strong>&lt;br&gt;CONJUNCTIVAL</td>
<td>Ceftriaxone 1 g IM once&lt;br&gt;PLUS&lt;br&gt;Azithromycin 1 g orally once&lt;br&gt;Consider lavage of the infected eye with saline solution once</td>
<td>No specific alternative regimens exist.</td>
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<tr>
<td><strong>INFANTS AND CHILDREN ≤45KG</strong></td>
<td>Ceftriaxone 25-50 mg/kg IV or IM once (maximum 125 mg)</td>
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<tr>
<td><strong>NEONATES</strong>&lt;br&gt;OPHTHALMIA NEONATORUM</td>
<td>Ceftriaxone 25-50 mg/kg IV or IM once (maximum 125 mg)</td>
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</table>

In addition, note that there are recommended changes to follow-up of cases of gonococcal infection.

- **Use of any alternative treatment for treatment of pharyngeal gonorrhea** should be followed by a test-of-cure in fourteen days using either culture and/or nucleic acid amplification test (NAAT). If NAAT is positive, effort should be made to perform a confirmatory culture before retreatment. All positive cultures for test-of-cure should undergo antimicrobial susceptibility testing.

- **If treatment failure is suspected, and reinfection is not likely**, obtain relevant clinical specimens for culture (preferably with simultaneous NAAT) and perform antimicrobial susceptibility testing before retreatment. Dual treatment with single doses of oral gemifloxacin, 320 mg, plus oral azithromycin 2 g; or dual treatment with single doses of IM gentamicin, 240 mg, plus oral azithromycin 2 g can be considered. Notify and consult with the MDPH at 617-983-6940. Consultation with an infectious disease specialist, an STD/HIV Prevention Training Center (www.nnptc.org), or CDC should also be considered.

If you have questions or would like to consult health department staff regarding these or other STD management protocols, please call the Division of STD Prevention at 617-983-6940.