The U.S. Preventive Services Task Force (USPSTF) strongly recommends that clinicians routinely screen all sexually active women age 25 years and younger, and other asymptomatic women at increased risk for infection, for chlamydia infection. 

Rationale: The USPSTF found good evidence that screening women at risk for chlamydia infection reduces the incidence of pelvic inflammatory disease and fair evidence that community-based screening reduces prevalence of chlamydia infection. The USPSTF concludes that the benefits of screening substantially outweigh the potential harm.

The USPSTF makes no recommendation for or against routinely screening asymptomatic low-risk women in the general population (over 25 and not sexually active) for chlamydia infection. 

Rationale: The USPSTF found at least fair evidence that screening low-risk women could detect some additional cases of Chlamydia trachomatis, but concludes that the potential benefits of screening low-risk women may be small and may not justify the possible harms.

The USPSTF recommends that clinicians routinely screen all asymptomatic pregnant women age 25 years and younger and others at increased risk for infection for chlamydia infection.

Rationale: The USPSTF found at least fair evidence that screening and treatment of women at risk for chlamydial infection improves pregnancy outcomes and concludes that the benefits of screening outweigh potential harms.

The USPSTF makes no recommendation for or against routine screening of asymptomatic, low-risk pregnant women aged 26 years and older for chlamydia infection.

Rationale: The USPSTF found fair evidence that the benefits of screening low-risk pregnant women are small and may not justify the possible harms.

The USPSTF concludes that the evidence is insufficient to recommend for or against routinely screening asymptomatic men for chlamydia infection.

Rationale: No direct evidence was found to determine whether screening asymptomatic men for chlamydia infection is effective for reducing the incidence of new infections in women. The benefits and harms of screening men cannot be determined, but the potential magnitude of benefits could be large if the effectiveness of screening men can be demonstrated.

**CHLAMYDIA Screening Guidelines**

**U.S. Preventive Services Task Force**

**Chlamydia Screening Guidelines**

**COMPARISON OF CHLAMYDIA TESTING TECHNOLOGIES**

<table>
<thead>
<tr>
<th>TEST</th>
<th>ADVANTAGES</th>
<th>DISADVANTAGES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nucleic acid amplification (NAATs): polymerase chain reaction (Roche Amplicor): ligation-mediated amplification (Gen-Probe AP-TIMA); and strand displacement amplification (Becton-Dickinson BD ProbeTec ET)*</td>
<td>• 90% or greater sensitivity and specificity</td>
<td>• More expensive than DNA Probe or EIA</td>
</tr>
<tr>
<td>Culture</td>
<td>Specifcity nears 100%, thereby reducing the potential for false positive results</td>
<td>Requires a skilled laboratorian, laboratory intensive, and expensive</td>
</tr>
<tr>
<td>DNA Probe</td>
<td>• More-stable transport of specimens</td>
<td>• Cervical specimens only</td>
</tr>
<tr>
<td>EIA</td>
<td>• Less technically demanding than culture</td>
<td>• Cervical specimens only</td>
</tr>
</tbody>
</table>

*The American College of Obstetricians and Gynecologists recommends that re-screening by performed in the third trimester in women at increased risk for chlamydia. Increased risk factors include new or multiple partners, history or presence of other sexually transmitted disease, little or no prenatal care, and sexually active women <25 years.


**FOR PREGNANT WOMEN**

- **ALTERNATIVE REGIMENS**
  - Erythromycin base 250mg orally four times a day for 14 days
  - Erythromycin ethylsuccinate 800mg orally four times a day for seven days
  - Azithromycin

**RECOMMENDED REGIMENS FOR PREGNANT WOMEN**

- **OR**
  - Azithromycin 1g orally in a single dose
  - Amoxicillin 500mg orally three times daily for seven days
  - Erythromycin base 500mg orally four times a day for seven days

**B. FOLLOW-UP OF PATIENTS/CLIENTS TREATED FOR UNCOMPLICATED CHLAMYDIA**

1. Patients/clients should return for re-evaluation if symptoms persist or recur after treatment.
2. Re-screening three to four months following treatment for chlamydia is recommended as an effective strategy for detecting re-infection, which occurs in 10–25 percent of women after an initial chlamydia infection.
3. Test of cure is recommended three to four weeks after completing therapy with erythromycin because it is less efficacious than azithromycin, doxycycline, ofloxacin or levofloxacin, and gastrointestinal side effects frequently discourage patients from complying with this regimen.
4. Test of cure is recommended three to four weeks after treatment for all pregnant women because the efficacy of amoxicillin and erythromycin is poor, and data on the efficacy and safety of azithromycin are limited.
5. Test of cure is NOT recommended in non-pregnant patients/clients treated with azithromycin, doxycycline, ofloxacin or levofloxacin, unless symptoms persist or re-infection is suspected.
6. To minimize further transmission of infection and risk of re-infection, patients/clients treated for chlamydia should be instructed to abstain from sexual intercourse for seven days after single dose therapy or until completion of a seven-day regimen and until seven days after all of their sex partners are treated.
7. Refer partners in past 60 days for evaluation and treatment.

**TEST ADVANTAGES DISADVANTAGES**

- **Culture**
  - Specifcity nears 100%, thereby reducing the potential for false positive results
  - Requires a skilled laboratorian, laboratory intensive, and expensive
  - Sensitivity is about 80%
  - Cervical specimens only
- **DNA Probe**
  - More-stable transport of specimens
  - Cervical specimens only
  - Sensitivity is about 65%
- **EIA**
  - Less technically demanding than culture
  - Cervical specimens only
  - Sensitivity is about 65%

*Although not a true NAAT, the Digene Hybrid Capture II nucleic acid amplification and bead technology performance characteristics. Source: CDC, National Center for HIV, STD and TB Prevention, Division of Sexually Transmitted Diseases, 2003. http://www.cdc.gov/std/Hepa/Publications/0508/Chlamydia/ on the web.*
Treatment of Chlamydia Infections and Associated Syndromes

**POLICY STATEMENT**
Clinics should follow the latest CDC STD Treatment Guidelines’ recommended regimens and have written treatment protocols. If all recommended regimens are contraindicated, an alternative regimen should be followed.

**A. TREATMENT OF UNCOMPLICATED CHLAMYDIAL INFECTIONS**

1. Non-pregnant Adolescents and Adults
   a) To maximize compliance with recommended therapies, medications for chlamydia infections should be dispensed on site.
   b) To minimize further transmission of infection, patients treated for chlamydia should be instructed to abstain from sexual intercourse until seven days after single dose therapy or until completion of a seven-day regimen.
   c) To minimize the risk of re-infection, patients should also be instructed to abstain from sexual intercourse until seven days after all their sex partners are treated.

<table>
<thead>
<tr>
<th>RECOMMENDED REGIMENS</th>
<th>ALTERNATIVE REGIMENS</th>
</tr>
</thead>
</table>
| • Azithromycin 1g orally in a single dose OR • Doxycycline 100mg orally twice a day for seven days
| • Erythromycin base 500mg orally four times a day for seven days OR • Erythromycin ethylsuccinate 800mg orally four times a day for seven days OR • Ofloxacin 300mg orally twice a day for seven days OR • Levofloxacin 500mg orally once daily for seven days |

d) Azithromycin is probably more cost-effective in populations with poor drug compliance, little follow-up, or erratic health care-seeking behavior, as it provides the opportunity for single-dose, directly observed therapy.

e) Azithromycin is approved for use in persons of all ages including adolescents and may be particularly beneficial for use in treating adolescents (traditionally a noncompliant population).

f) Doxycycline has the advantage of low cost and a longer history of extensive use.

g) Ofloxacin and levofloxacin are similar in efficacy to doxycycline and azithromycin, but are more expensive and offer no advantage in dosing.

h) Test of cure is recommended three to four weeks after completing therapy with erythromycin because it is less efficacious than azithromycin, doxycycline, ofloxacin or levofloxacin, and gastrointestinal side effects frequently discourage patients/clients from complying with this regimen.

i) Test of cure is not recommended at three to four weeks after treatment with azithromycin, doxycycline, ofloxacin or levofloxacin. (Re-screening three to four months following treatment for chlamydia is recommended as an effective strategy for detecting re-infection, which occurs in 10-25 percent of women after an initial chlamydia infection.)

j) Re-screen women three to four months after treatment for chlamydia. (Re-screening three to four months following treatment for chlamydia is recommended as an effective strategy for detecting re-infection, which occurs in 10-25 percent of women after an initial chlamydia infection.)

2. Presumptive Treatment Criteria
   **Policy Statement:** Among women, several serious sequelae may result from C. trachomatis infection, the most serious including PID, ectopic pregnancy and infertility. Given the likelihood of infection and the fact that chlamydia test results are not available at the time of the visit and are not 100 percent sensitive, a presumptive diagnosis and empirical treatment given at the time of the visit should be considered if patients/clients present with syndromes or circumstances associated with chlamydial infection.

   a) Chlamydia testing in patients/clients who are presumptively treated is desirable for public health and compliance reasons.

   The goal of testing is chlamydia detection, treatment, and prevention of the associated sequelae for patients/clients, their sex partners, and their children. While diagnostic testing is recommended when treating presumptively, depending on the resources of the agency involved, treatment may occur without chlamydia testing of the patient/client.

   b) Limited data exist on the efficacy and safety of azithromycin for pregnant women. Erythromycin estolate is contraindicated during pregnancy because of drug-related hepatotoxicity.

   Treatment Considerations During Pregnancy
   a) Doxycycline, ofloxacin and levofloxacin are contraindicated for pregnant women. Erythromycin estolate is contraindicated during pregnancy because of drug-related hepatotoxicity.

   b) Limited data exist on the efficacy and safety of azithromycin for pregnant women. However, in view of widespread use of azithromycin to treat pregnant, infected women by clinicians in Region IX and the absence of reports of adverse outcomes, its use in pregnancy is considered acceptable.

   c) Test of cure is recommended three to four weeks after treatment for all pregnant women because the efficacy of azosulfinil and erythromycin is poor, and data on the efficacy and safety of azithromycin are limited.

3. Chlamydia in Pregnancy: Clinical significance
   The reported prevalence of chlamydia infections in pregnancy ranges from 2-13 percent, depending on age and other risk factors. Like non-pregnant women, pregnant women infected with chlamydia are at risk for cervicitis, urethritis, and pelvic inflammatory disease. Chlamydia infections during pregnancy can also cause chorioamnionitis and post-partum endometritis, and may be associated with gestational bleeding, premature rupture of the membranes, and preterm labor and delivery.

   Perinatal transmission and neonatal complications of chlamydia occur in up to 50 percent of newborns whose mothers are infected with chlamydia at delivery. Exposed infants are at risk for conjunctivitis (25-50 percent of those exposed) and neonatal pneumonia (5-20 percent of those exposed).

   Screening Recommendations During Pregnancy
   a) At first prenatal visit
   b) In third trimester for women at increased risk for chlamydia

   Treatment Considerations During Pregnancy
   a) Doxycycline, ofloxacin and levofloxacin are contraindicated for pregnant women. Erythromycin estolate is contraindicated during pregnancy because of drug-related hepatotoxicity.