### Chlamydial Infection

#### Cervix or Urethral

**DEFINITION**
Chlamydial infection is the most frequently reported infectious disease in the United States. Overall, the largest burden of infection is among women aged <25 years. It can result in pelvic inflammatory disease, infertility, ectopic pregnancy, preterm labor, neonatal conjunctivitis and pneumonia. Annual screening of all sexually active women aged <25 is recommended. The screening of sexually active men should be considered in clinical settings with a high prevalence of chlamydia. Evidence is insufficient to recommend routine screening for men. Chlamydia is currently considered a reportable disease in the state on North Dakota.

**SUBJECTIVE**
- May include:
  1. No symptoms (common among both men and women).
  2. All sexually active adolescents and women < 25 years of age should be screened annually, even if they are without symptoms.
  3. Women >25 years of age who meet both of the following:
     a. Inconsistent use of barrier contraception.
     b. New or more than one partner since last exam.
  4. Vaginal discharge, penile discharge, or urethral erythema.
  5. Dysuria or urinary frequency.
  6. Recently confirmed gonorrhea or other STD.
  7. Sexual partner with a history of non-gonococcal urethritis, epididymitis or prostatitis, or chlamydia.
  8. Sexual partner with symptoms of dysuria, testicular pain, or recent penile discharge.
  9. Pelvic pain, post-coital bleeding, or changes in menses.

**OBJECTIVE**
- May include:
  1. Erythematous or friable cervix.
  2. Mucopurulent discharge from the cervix.
  3. Mild tenderness on compression of the cervix.
  4. Cervical motion tenderness. (Positive Chandelier Sign)
  5. Adnexal or uterine tenderness.
  6. Urethral erythema or penile discharge.
Consider differential diagnosis of:
  1. Pyelonephritis with fever, tachycardia, CVA tenderness.
  2. PID with cervical motion tenderness, adnexal tenderness, and lower abdominal tenderness.
  3. Epididymitis with scrotal swelling.

**LABORATORY**
- May include:
  1. Positive Chlamydia test, at the anatomical site of exposure.
  2. Wet mount with >10 WBC/HPF

**ASSESSMENT**
- Chlamydial infection of cervix, urethra, rectum, or oropharynx; known or suspected.

**PLAN**
1. For non-pregnant, non-breastfeeding clients, treatment options include:
   - **Recommended Regimens:**
     - Azithromycin 1 g orally in a single dose **OR**
     - Doxycycline 100 mg orally twice a day for 7 days.
   - **Alternative Regimens:**
     - Erythromycin base 500 mg orally four times a day for 7 days **OR**
     - Erythromycin ethyl succinate 800 mg orally four times a day for 7 days **OR**
     - Levofloxacin 500 mg orally once daily for 7 days **OR**
     - Ofloxacin 300 mg orally twice a day for 7 days.
2. For pregnancy or breastfeeding clients, or clients allergic to Doxycycline, options include:

**Recommended Regimens:**
- Azithromycin 1 g orally in a single dose

**Alternative Regimens:**
- Amoxicillin 500 mg orally three times a day for 7 days OR
- Erythromycin base 500 mg orally four times a day for 7 days OR
- Erythromycin base 250 mg orally four times a day for 14 days OR
- Erythromycin ethyl succinate 800 mg orally four times a day for 7 days OR
- Erythromycin ethyl succinate 400 mg orally four times a day for 14 days.

3. Screen for other STIs as appropriate.
4. The most recent sexual partner(s) should be evaluated and treated per CDC guidelines.
5. Clients who have chlamydial infection and also are infected with HIV should receive the same treatment regimen as those who are HIV negative.
6. Except in pregnant women, test-of-cure (i.e.: repeat testing 3-4 weeks after completing therapy) is not advised unless therapeutic compliance is in question, symptoms persist, reinfection is suspected, or erythromycin-based regimen was used.
7. Pregnant women:
   a. Repeat testing to document Chlamydia eradication 3-4 weeks after completion of therapy.
   b. Women <25 years and those with increased risk for Chlamydia should be retested during the 3rd trimester.
   c. Diagnoses with Chlamydia infection during the 1st trimester should not only receive a test to document eradication but retest 3 months after treatment.
8. Screening of sexually active men should be considered in clinical settings with a high prevalence of Chlamydia or in populations with high burden of infection (e.g. Men who have sex with men/MSM). If resources permit and do not hinder screening efforts in women.

**CLIENT EDUCATION**

1. Provide client education handout(s) with review of symptoms, treatment options, and medication side effects.
2. Advise to avoid intercourse until client and partner(s) complete treatments, e.g., 7 days after single dose regimen or after completion of 7-day regimen.
3. Stress necessity of treating sexual partner(s). Among heterosexual patients, patient delivery antibiotic therapy to their partners may be considered if concerns exist that sexual partners will not seek services. (See Reproductive Diseases: Expedited Partner Therapy)
4. Advise client to seek immediate medical care if she develops fever or chills, severe abdominal pain, or other symptoms of PID.
5. Review safer sex education, as appropriate.
6. Recommend client return to clinic as needed or if symptoms reoccur.
7. Recommend pregnant women with chlamydia infection have a test of cure 3-4 weeks after treatment. In addition, all pregnant women who have chlamydia infection diagnosed should be retested 3 months after treatment.
8. Advise men and non-pregnant women to be rescreened approximately 3 months after treatment or if not possible, retest whenever they return for medical care in the 12 months following initial treatment.

**CONSULT/ REFER TO PHYSICIAN**

1. Clients whose symptoms or signs do not resolve following treatment.
References: