Syphilis

DEFINITION
Syphilis is a systemic disease caused by T. pallidum. Clients with Syphilis may seek treatment for signs or symptoms of primary, secondary, or tertiary infections. CDC recommends testing regularly for syphilis in pregnancy and high-risk individuals including MSM, HIV infection, and/or partners who have tested positive for syphilis. Syphilis is currently considered a reportable disease in the state of North Dakota.

SUBJECTIVE
May include:
1. Sore, usually firm, round, and painless. Located at site syphilis entered the body. Common sites include genitals, pharynx, lips, anus, cervix and breast.
2. Skin rashes, sores, or bumps in the mouth, vagina or anus
3. Fever, sore throat, swollen lymph glands
4. Headache or muscle aches
5. Weight loss or fatigue
6. Hair loss
7. May be asymptomatic

OBJECTIVE
The disease has been divided into stages based on clinical findings, helping to guide treatment and follow-up:
Primary Stage:
The classical chancre is a painless indurated ulcer located at the site of exposure. The differential diagnosis for all genital lesions should include syphilis.
Secondary Stage may include but is not limited to:
   a. Lymphadenopathy
   b. Highly variable skin rash
   c. Neurologic infections, mucocutaneous lesions, cranial nerve dysfunction, meningitis, CVA, acute or chronic altered mental status, loss vibration sense, auditory or ophthalmic abnormalities.
   d. Condylomata lata (fleshy moist growths)
Latent:
   a. Serological evidence of untreated syphilis without clinical signs of infections
Tertiary:
   a. Evidence of tertiary disease (e.g., cardiac, gummatous (granulomatous) lesions, tabes dorsalis, and general paresis.
Neurosyphilis:
CNS involvement can occur during any stage of syphilis. (e.g., cognitive dysfunction, motor or sensory deficits, cardiac problems, ophthalmic or auditory symptoms, cranial nerve palsies, and symptoms or signs of meningitis).

LABORATORY
May include:
1. A presumptive diagnosis is possible with the use of two types of serologic tests for Syphilis:
   a. Nontreponemal tests (e.g., Venereal Disease Research Laboratory (VDRL) and Rapid Plasma Reagin (RPR) Results should be reported quantitatively and sequential serological tests should be performed using the same testing method and preferably the same laboratory.
   b. Treponemal tests (e.g., fluorescent treponemal antibody absorbed (FTA-ABS) and T. pallidum passive particle agglutination (TP-PA).
   c. The use of only one type of serologic test is insufficient for diagnosis, because false-positive nontreponemal test results may occur secondary to various medical conditions.
2. Darkfield examinations (not provided through the ND State Lab or Family Planning
### Syphilis

**ASSESSMENT** Syphilis

**PLAN**

Treatment options include:

1. Primary, secondary, or early latent Syphilis in adolescents and adults. (Early latent Syphilis is latent Syphilis of less than one-year duration)
   a. Benzathine penicillin G 2.4 million units IM in a single dose

2. Early Syphilis in non-pregnant adults and adolescents allergic to penicillin. (Use in HIV-infection has not been well studied)
   - Doxycycline 100 mg. orally BID x 14 days,
   - OR
   - Tetracycline 500 mg. orally QID x 14 days.

3. Late latent syphilis (> 1 year duration) or latent syphilis of unknown duration (excluding neurosyphilis) in adults and adolescents.
   a. Benzathine penicillin G 7.2 million units total, administered as 3 doses of 2.4 million units IM each at 1-week intervals; restart sequence of injections if greater than 10-14 days lapse between doses.
   b. For non-pregnant persons allergic to penicillin, (Use in HIV-infection has not been well studied).
      - Doxycycline 100 mg orally BID x 28 days,
      - OR
      - Tetracycline 500 mg orally QID x 28 days.

4. Screen for HIV and other STDs as appropriate.

5. Clients who are allergic to penicillin whose compliance with therapy or follow-up cannot be ensured should be referred to their PMD for desensitization and treatment with benzathine penicillin.

6. Post-exposure prophylactic treatment is recommended for asymptomatic persons exposed or possibly exposed to syphilis. This would be considered in a case by case basis and should involve consultation with the field epidemiologist.

7. Repeat testing for primary and secondary syphilis at 6 and 12 months. For latent syphilis, quantitative nontreponemal serologic tests at 6, 12 and 24 months.

**CLIENT EDUCATION**

1. Provide education handout, review symptoms, treatment options and medication side effects, including Jarisch-Herxheimer reaction

2. Advise client to avoid intercourse until course of treatment is completed for client and partner(s).

3. Stress importance of follow-up for sexual contact(s).

4. Discuss HIV and other STD testing as appropriate.

5. Review safer sex education, as appropriate.

6. Repeat testing as indicated above in plan #7.

**CONSULT/ REFER TO PHYSICIAN**

1. HIV infected clients, and other immunocompromised patients

2. All pregnant clients

3. Children

4. Clients with evidence of tertiary Syphilis or neurosyphilis should be referred to and managed in consultation with an infectious diseases specialist

5. Patients with penicillin allergies

6. Refer/consult all clients to State Health Department or PMD for continued treatment and follow up.
References: