- Footnotes: a) For the case definition of congenital syphilis (CS), the mother must have evidence of syphilis by one of the following tests: 1) a syphilitic lesion at the time of delivery proven by positive darkfield or direct fluorescent antibody (DFA) examination; or 2) a reactive treponemal test (e.g., FTA-ABS, MHA-TP). A treponemal test on the mother may not be available for an infant evaluated outside the newborn period or a child with late CS. In these instances, the investigation may proceed on the basis of infant/child treponemal and nontreponemal tests. An attempt to obtain a maternal treponemal test should be made.
 - **b)** Adequate therapy in a non-pregnant woman should be one of the standard treatment regimens recommended for her particular stage of infection (See 2006 STD Treatment Guidelines).

Adequate therapy in a pregnant woman is treatment with a penicillin regimen, appropriate for the mother's stage of syphilis, started at least 30 days before delivery (see 2006 STD Treatment Guidelines). Any non-penicillin treatment or penicillin treatment in the last 30 days of pregnancy is inadequate for the unborn child.

C) <u>Appropriate response</u> to therapy is a fourfold decline in non-treponemal titer by three months with primary or secondary syphilis, or a fourfold decline in non-treponemal titer by six months with early latent syphilis.

An <u>inappropriate response</u> is less than a fourfold drop over the expected time period unless the patient is known to be serofast (see below). An <u>equivocal response</u> includes instances where it was difficult to assess adequate response because either no interim titers from treatment to delivery were available or insufficient time had passed between treatment and delivery. An <u>unknown response</u> includes those instances where titers before treatment and/or at delivery are not available. The infant/child of a mother with an equivocal or unknown response should be evaluated for CS.

Special consideration is required in the case of a <u>serofast</u> patient. If a mother's titer was 1:1, 1:2, or 1:4 before pregnancy, there is evidence of adequate treatment, and at delivery her titer is still the same low level, she should be regarded as serofast. Stop the case investigation; this is not a case.

- **d)** A syphilitic stillbirth is defined as a fetal death—in which the mother had untreated or inadequately treated syphilis at delivery of a fetus after a 20-week gestation or weighing >500 grams.
- **e)** Signs of CS (usually in an infant or child <2 years old) include: condyloma lata, snuffles, syphilitic skin rash, hepatosplenomegaly, jaundice due to syphilitic hepatitis, pseudoparalysis, or edema (nephrotic syndrome and/or malnutrition). Stigmata in an older child may include: interstitial keratitis, nerve deafness, anterior bowing of shins, frontal bossing, mulberry molars, Hutchinson's teeth, saddle nose, rhagades, or Clutton's joints.
- f) The 19S-IgM-FTA-ABS is highly sensitive and specific in untreated neonatal syphilis. Other IgM-based treponemal tests are in use or in development. These are not yet considered standard tests of syphilis and should not be relied upon to define a case of CS. For specific questions regarding IgM-based treponemal test(s) being used in your area, contact the Division of STD Laboratory Research (404) 639-3446.
- **g)** In the immediate newborn period, interpretation of these tests may be difficult; normal values vary with gestational age and are higher in preterm infants. CSF cell count and protein in a term or preterm infant should be interpreted by the clinician. Beyond the neonatal period, a CSF cell count >5 wbc/mm³ or a CSF protein >40 mg/dl is abnormal, regardless of CSF serology.

(See instruction booklet for more details)

