CONGENITAL SYPHILIS (CS)

Evaluation and treatment of infants (<30 days old) exposed to syphilis in utero*

Start

INFANTS AND BIRTHING PARENT (e.g., mother) SHOULD HAVE SERUM RPR TITER DRAWN AT DELIVERY

Infant and Maternal Criteria

Infant Criteria:
- CS findings on physical exam
- Infant titer ≥fourfold higher than mother's titer
- + darkfield or PCR of placenta, cord, lesions, or body fluid
- + silver stain of placenta or cord

No to all

Maternal Criteria:
- Not treated
- Inadequately treated§
- Treatment undocumented
- Treated with a non-penicillin G regimen
- Initiated treatment <30 days before delivery

No to all

Additional Maternal Criteria:
- Adequately treated with penicillin G regimen appropriate for stage, initiated ≥30 days before delivery

AND

- No concern for reinfection or treatment failure

Yes to any

Scenario 1: Proven or Highly Probable CS

Yes to any

Scenario 2: Possible CS‖

Yes to both

Scenario 3: Less Likely CS

Infant Evaluation

- **CSF analysis†** VDRL, cell count, and protein
- **Complete blood count (CBC),** differential, and platelet count
- **Long-bone radiographs**
- **Tests as clinically indicated by signs on physical exam**

- **CSF analysis†** VDRL, cell count, and protein
- **CBC,** differential, and platelet count
- **Long-bone radiographs**

No additional infant evaluation

Review Maternal Titers & Stage:
- ≥4 fold decrease in titer after treatment for early syphilis

OR

- Stable titer for low-titer, latent syphilis (RPR < 1:4)

Any abnormalities, results not available, *OR* follow-up¶ uncertain

No abnormalities *AND* follow-up¶ certain

No to both *OR* follow-up¶ uncertain

Yes to either *AND* follow-up¶ certain

Infant Treatment

Aqueous crystalline penicillin G
100,000–150,000 units/kg/day, administered as 50,000 units/kg/dose IV every 12 hours during the first 7 days of life and every 8 hours thereafter for a total of 10 days

Benzathine penicillin G
50,000 units/kg/dose IM in a single dose

No treatment indicated
with close serologic follow-up of infant every 2-3 months for 6 months

* Scenario 4: CS Unlikely is not shown. This scenario covers infants with normal physical exam and RPR titer ≤fourfold of the maternal titer at delivery, and the mother was adequately treated prior to becoming pregnant and sustained RPR titers ≤1:4 throughout pregnancy.

† CSF test results obtained during the neonatal period can be difficult to interpret; normal values differ by gestational age.

§ Adequate treatment for syphilis in a pregnant person refers to the appropriate penicillin regimen recommended by the CDC initiated at least 30 days prior to delivery. Adequate therapy does not include ampicillin, penicillin, or ceftriaxone for GBS infections or colonization in pregnancy.

‖ Evaluation is not necessary if a 10-day course of parenteral therapy is administered, although such evaluations might be useful. If the neonate's nontreponemal test is nonreactive and the mother's risk for untreated syphilis is low, a single IM dose of benzathine penicillin G (BPG) can be considered without evaluation.

¶ All neonates with reactive nontreponemal tests should receive careful follow-up examinations and serologic testing (i.e., a nontreponemal test) every 2–3 months until the test becomes nonreactive. Neonates with a negative nontreponemal test at birth whose mothers were seroreactive at delivery should be retested at 3 months to rule out serologically negative incubating congenital syphilis at the time of birth.

FOR MORE INFORMATION ABOUT SCENARIO 4 MANAGEMENT, TREATMENT OF SYPHILIS IN PREGNANCY, NEONATAL CSF INTERPRETATION, AND CS INFANT FOLLOW-UP, PLEASE REFER TO THE CDC 2021 STI TREATMENT GUIDELINES.

Adapted with permission from CDPH/CAPTC, OHC/OR AETC

Last Updated: 11/24

Public Health
Seattle & King County