Congential Syphilis Case Definition (for public health reporting purposes)

Indiana Department of Health

The following guidance is for public health reporting purposes.
For more information on clinical case definitions/scenarios, please refer to this document.
For a clinical algorithm for management of congenital syphilis, please refer to this document.

Clinical Description
A condition caused by infection in-utero with *Treponema pallidum*. A wide spectrum of severity exists, from inapparent infection to severe cases that are clinically apparent at birth.

- An infant or child (aged less than two years) may have signs such as hepatosplenomegaly, rash, condyloma lata, snuffles, jaundice (non-viral hepatitis), pseudoparalysis, anemia, or edema (nephrotic syndrome and/or malnutrition). An older child may have stigmata (e.g., interstitial keratitis, nerve deafness, anterior bowing of shins, frontal bossing, mulberry molars, Hutchinson teeth, saddle nose, rhagades, or Clutton joints).

Laboratory Criteria for Diagnosis
Demonstration of *Treponema pallidum* by:

- Darkfield microscopy of lesions, body fluids, or neonatal nasal discharge, **OR**
- Polymerase chain reaction (PCR) or other equivalent direct molecular methods of lesions, neonatal nasal discharge, placenta, umbilical cord, or autopsy material, **OR**
- Immunohistochemistry (IHC), or special stains (e.g., silver staining) of specimens from lesions, placenta, umbilical cord, or autopsy material.

A patient is considered a confirmed case of congenital syphilis when:

- An abnormal physical examination that is consistent with congenital syphilis AND laboratory-confirmation via:
    - a serum quantitative nontreponemal serologic titer that is fourfold (or greater) higher than the mother's titer at delivery (e.g., maternal titer = 1:2, neonatal titer ≥1:8 or maternal titer = 1:8, neonatal titer ≥1:32); or
    - a positive darkfield test or PCR of placenta, cord, lesions, or body fluids or a positive silver stain of the placenta or cord.

A patient is considered a probable case of congenital syphilis if:

1. A condition affecting an infant whose mother had untreated or inadequately treated* syphilis at delivery, regardless of signs in the infant, **OR**
2. An infant or child who has a reactive non-treponemal test for syphilis (Venereal Disease Research Laboratory [VDRL], rapid plasma reagin [RPR], or equivalent serologic methods) **AND** any one of the following:
    - Any evidence of congenital syphilis on physical examination (see clinical description);
    - Any evidence of congenital syphilis on radiographs of long bones;
    - A reactive cerebrospinal fluid (CSF) venereal disease research laboratory (VDRL) test;
    - In a non-traumatic lumbar puncture, an elevated CSF leukocyte (white blood cell, WBC) count or protein (without other cause). Suggested parameters for abnormal CSF-WBC and protein values:

- During the first 30 days of life, a CSF-WBC count of >15 WBC/mm^3 or a CSF protein >120 mg/dL is abnormal.
- After the first 30 days of life, a CSF-WBC count of >5 WBC/mm^3 or a CSF protein >40 mg/dL, regardless of CSF serology.

*Adequate treatment is defined as the completion of a penicillin-based regimen, in accordance with Centers for Disease Control and Prevention treatment guidelines, appropriate for stage of infection, initiated thirty (30) or more days before delivery.