

Legacy Laboratory Services

Legacy Lab Alert

August 2016

An Important Update from Legacy Laboratory Services

Syphilis: New Screen and Testing Algorithms

To accommodate the increased volume of screening requests, effective October 4, 2016, Legacy Laboratory Services will use an automated Treponemal chemiluminescent immunoassay (CIA) as the initial syphilis screen. The current “traditional” syphilis screening algorithm will be discontinued. All positive screening results will be confirmed by a non-Treponemal test (Rapid Plasma Reagin, RPR), followed by another Treponemal test (Treponema *pallidum* Particle Agglutination, TP-PA), if indicated (see, Figure 1.A.).

Infants less than 30 days old will be provided a second screening option. The Center for Disease Control (CDC) recommends that all neonates born to mothers who have a reactive non-Treponemal or Treponemal test result should be evaluated with a quantitative non-Treponemal test (see, Figure 1.B.). Conducting a Treponemal test (i.e., TP-PA or CIA) on neonatal serum is not recommended by the CDC because of difficulties in interpretation.

For monitoring patients previously diagnosed with Syphilis, a quantitative non-Treponemal serologic test (RPR with reflex to titer) will be offered as recommended by the CDC. Specimen requirements and ordering information for all three tests are located in Table 1.

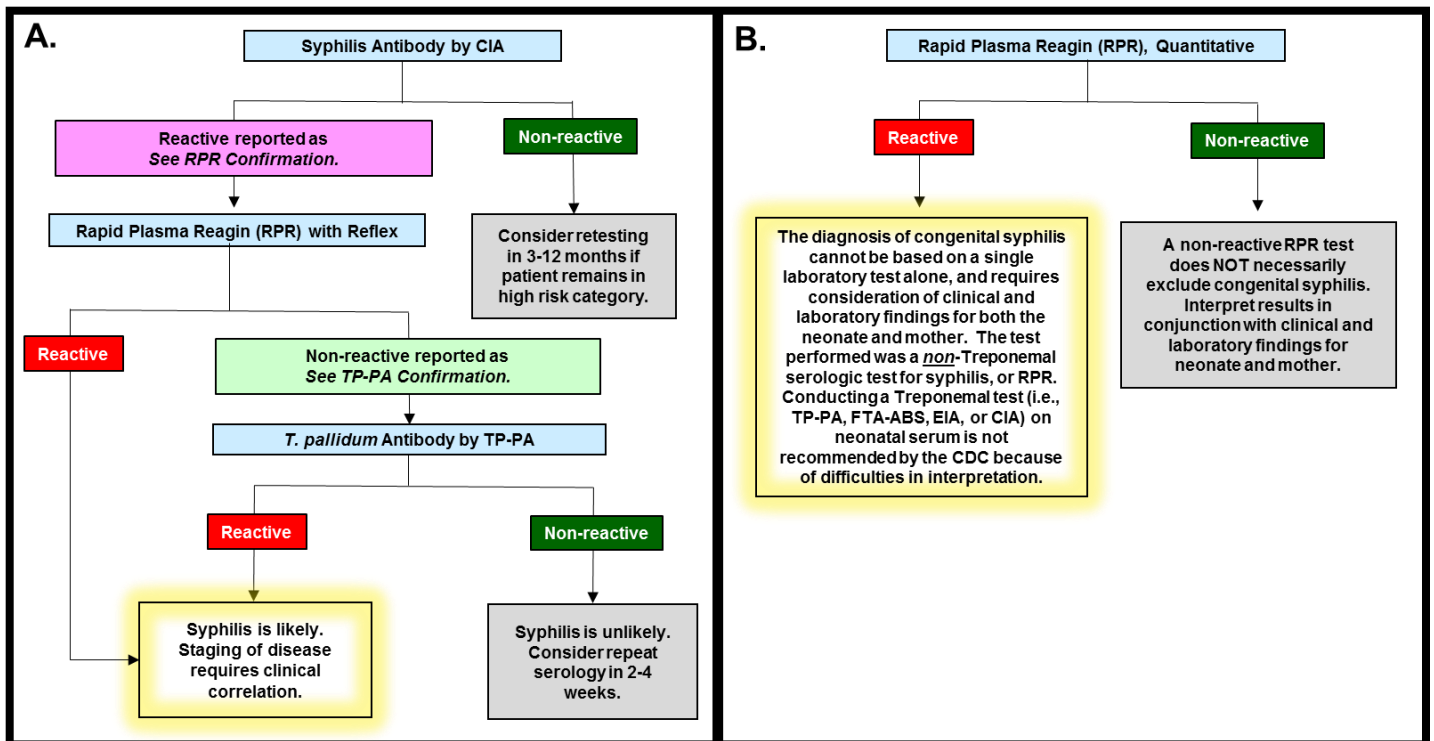


Figure 1: New Syphilis Screening Tests – A.) Syphilis Screen with Reflex, Reverse Algorithm is appropriate for screening patients greater than or equal to 30 days old according to the CDC. **B.)** CDC recommends using a quantitative non-Treponemal test for neonates, which is provided in the *Syphilis Screen Neonatal*.

Table 1: Specimen Requirements for Syphilis Tests

Name		Syphilis Screen with Reflex, Reverse Algorithm	Syphilis Screen Neonatal	Syphilis Monitor RPR
Mnemonic		SYPH SCN	SYPH SNEO	SYPH MONIT
Includes		Screen: Syphilis Antibody by CIA Possible confirmation, if indicated: <ul style="list-style-type: none"> RPR Confirmation with Reflex to Titer and TP-PA <i>T. pallidum</i> Antibody by TP-PA 	RPR with Reflex to Titer	RPR with Reflex to Titer
Guidelines		Order test for patients greater than or equal to 30 days old, including pregnant females.	Order test for patients less than 30 days old.	Order test to monitor patients previously diagnosed with syphilis.
Collect		Serum, one 5.0 mL gold (SST) or 7.0 mL red top tube	Serum, one 5.0 mL gold (SST) or 7.0 mL red top tube	Serum, one 5.0 mL gold (SST) or 7.0 mL red top tube
Handling		Allow serum to clot completely at room temperature (minimum: SST - 30 minutes and red top tubes - 60 minutes). Separate serum from cells within 1 hour of collection.	Allow serum to clot completely at room temperature (minimum: SST - 30 minutes and red top tubes - 60 minutes). Separate serum from cells within 1 hour of collection.	Allow serum to clot completely at room temperature (minimum: SST - 30 minutes and red top tubes - 60 minutes). Separate serum from cells within 1 hour of collection.
Preferred Volume		3.0 mL Serum	1.0 mL Serum	1.0 mL Serum
Minimum Volume		1.5 mL Serum (3.5 mL <i>minimum whole blood draw</i>)	0.5 mL Serum (1.2 mL <i>minimum whole blood draw</i>)	0.5 mL Serum (1.2 mL <i>minimum whole blood draw</i>)
Transport		Refrigerated (2-8 °C)	Refrigerated (2-8 °C)	Refrigerated (2-8 °C)
Rejection Criteria		<ul style="list-style-type: none"> Hemolyzed specimens Contaminated with bacteria Grossly lipemic or turbid specimens Plasma CSF 	<ul style="list-style-type: none"> Hemolyzed specimens Plasma CSF 	<ul style="list-style-type: none"> Hemolyzed specimens Plasma CSF
Stability	Ambient (18-26°C)	24 hours	24 hours	24 hours
	Refrigerated (2-8°C)	5 days	5 days	5 days
	Frozen (< -20°C)	1 month	2 months	2 months
Performed		Syphilis Screen: 7 days/week RPR: 7 days/week TP-PA: Mon-Fri	RPR: 7 days/week	RPR: 7 days/week
Reported		1-5 days	24 hours	24 hours
Method		Screen: Chemiluminescent Immunoassay Possible confirmation, if indicated: <ul style="list-style-type: none"> Cardiolipin Card Flocculation Assay <i>T. Pallidum</i> Particle Agglutination 	Cardiolipin Card Flocculation Assay	Cardiolipin Card Flocculation Assay
Reference Range		Interpretation provided.	Interpretation provided.	Interpretation provided.
Comments		Reactive <i>Syphilis Antibody by CIA</i> results are automatically reflexed to <i>RPR</i> . Reactive <i>RPR</i> results will be titered. Non-reactive <i>RPR</i> results will be reflexed to <i>T. Pallidum Antibody by TP-PA</i> for confirmation.	Reactive <i>RPR</i> results will be titered.	Reactive <i>RPR</i> results will be titered.
CPT Codes		Syphilis Ab: 86780 RPR: 86592 RPR Titer: 86593 TP-PA: 86780	RPR: 86592 RPR Titer: 86593	RPR: 86592 RPR Titer: 86593

Reference: Centers for Disease Control and Prevention (CDC), 2015 Sexually Transmitted Diseases Treatment Guidelines – Syphilis, <http://www.cdc.gov/std/tg2015/syphilis.htm>, Last reviewed: July 29, 2016.

For additional information, please contact your account representative, client services or consult our website:
 Legacy Laboratory Client Services: 503-413-1234, 877-270-5566, www.legacyhealth.org/labservices