

Date: November 24, 2016

To: All Physicians, Medical Officers of Health, Nurses, Microbiologists and Laboratory Directors in Alberta

From: Provincial Laboratory for Public Health (ProvLab)

Re: Change of the Confirmatory Test for Syphilis

PLEASE POST OR DISTRIBUTE AS WIDELY AS APPROPRIATE

Key Messages:

- Starting December 1, 2016, the INNO-LIA confirmatory syphilis test will be replaced by the ***Treponema pallidum* Particle Agglutination test (TPPA)**.
- Syphilis serology algorithm:
 1. Antibody detection by Enzyme Immunoassay (EIA)
 2. If the EIA is positive: Rapid Plasma Reagin assay (RPR) and TPPA will be performed.
 - a. Results will be reported as **Reactive, Indeterminate** or **Non-reactive**.
- **TEMPORARY:** While our Laboratory Information System is being configured for this new assay, the **TPPA results will be reported under the TPPA Ref** orderable.
- If TPPA results are indeterminate:
 - Repeat test in 2-3 weeks if early syphilis infection is clinically suspected. If the second TPPA result is indeterminate, it likely represents a biological false-positive.
- The ProvLab Syphilis Serodiagnostic Algorithm can be accessed using the following link: <http://www.provlab.ab.ca/wf-provlab-syphilis-testing-algorithm.pdf>
- Sample reports can be accessed using the following links: <http://www.provlab.ab.ca/wf-sample-tpa-report-non-reactive-result.pdf> and <http://www.provlab.ab.ca/wf-sample-tpa-report-reactive-result.pdf>
- Further information on syphilis testing can be obtained in the education document posted on the ProvLab website education page: <http://www.provlab.ab.ca/education.htm>

Why this is important:

- The literature has shown the TPPA to be as specific and in some cases, more specific than the INNO-LIA for the detection of *T. pallidum* infection.
- In response to the INNO-LIA assay producing invalid and indeterminate results in a number of cases, the TPPA is being introduced to improve the timeliness of patient diagnosis and management.

Inquiries and feedback may be directed to:

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This bulletin has been reviewed and approved by:

Dr. Graham Tipples, Medical / Scientific Director, Provincial Laboratory for Public Health