

MLS Laboratory Update: Public Health Laboratory Transition to the Rapid Plasma Reagin (RPR) Syphilis Screening Assay

SEPTEMBER 22, 2022

Purpose of this Message:

This message is to alert laboratories of an assay change within the Minnesota Department of Health Public Health Laboratory (MDH PHL) from the syphilis Unheated Serum Reagin (USR) to the Rapid Plasma Reagin (RPR). Beginning Monday, September 26, 2022, specimens received by MDH PHL for syphilis testing will be tested using the RPR.

Action Item:

None

Background:

MDH PHL has previously used the USR as the primary, nontreponemal screening assay in syphilis diagnosis in patient sera. In order to harmonize PHL methods to standard algorithm syphilis testing, PHL will change to the RPR assay.

Currently, the MDH PHL utilizes a laboratory developed assay, the USR, for syphilis screening in patient serum samples. The USR is reported qualitatively and, for reactive samples, quantitatively. Reactive samples are reflexed to a treponemal-specific assay, the *Treponema pallidum* particle agglutination (TP-PA) assay.

To reduce the complexity of maintaining a laboratory developed test and to harmonize MDH PHL laboratory practices with the field, we have validated the RPR as a replacement to the USR. The RPR will also be reported both qualitatively and quantitatively. Two-fold quantitative dilutions will cover the range from 1:1 to > 1:8192.

At this time MDH PHL will not be adopting the reverse algorithm for syphilis diagnostic testing.

Additional Information:

The change to the RPR may require an update of submitting partners electronic medical record coding information.

New MDH PHL Order Choice: Syphilis Screen by RPR - Serum

This order choice includes the new lab test Syphilis RPR Qualitative. Results will be reported as one of the following descriptions:

Result
Reactive
Nonreactive
Not Tested
Unsatisfactory

New MDH PHL Order Choice: Syphilis RPR Quantitative Titer- Serum

This order choice includes the new lab test Syphilis RPR Quantitative. Results will be reported as:

Result
Not tested
A 2-fold titer value in the range of 1:1 to > 1:8192

Questions:

For specimen or assay-specific questions, please contact:

Scott Cunningham, Virology Unit Supervisor at Scott.Cunningham@state.mn.us

Thank you for your partnership.

Scott Cunningham

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