January 17, 2017

**BCCDC Public Health Laboratory Discontinuation of Mycoplasma pneumoniae IgM Serology**

The BCCDC Public Health Laboratory (PHL) has been using IgM serology in addition to nucleic acid testing (NAT) for detection of acute *M. pneumoniae* infection. *M. pneumoniae* IgM serology has significant limitations when used for the detection of acute infection. A recent analysis of *M. pneumoniae* IgM serology at the BCCDC PHL demonstrated that up to 70% of prenatal women had reactive *M. pneumoniae* IgM test results. This is consistent with highly variable positivity rates in the general population, ranging between 4%-55% depending on the population’s age and the assay used\(^1\)\(^2\). Another challenge is that the laboratory typically does not receive acute and convalescent sera to assess for seroconversion which would help identify recent infections. Ultimately *M. pneumoniae* IgM reactive serologic results are unable to differentiate between acute disease, remote disease or a false-positive test result.

**As a result, effective January 2017, testing for *M. pneumoniae* IgM will be discontinued at BCCDC PHL.**

Acute *M. pneumoniae* infection can, instead, be detected by NAT on respiratory specimens; lower respiratory specimens, such as sputum, are preferred.

If a sample is sent for *M. pneumoniae* IgM serology, the order will be resulted with the following comment: "Mycoplasma pneumoniae IgM serology is no longer available. Reactive test results do not differentiate between acute infections, resolved infections, or false-positive results. If an acute infection is suspected please submit a sputum for Mycoplasma pneumoniae nucleic acid testing. If a post-infectious syndrome is considered please consult the BCCDC medical microbiologist at on-call at 604 661-7033."

References:

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