

Laboratory Diagnosis of Respiratory Tract Infection Caused by *Mycoplasma pneumoniae*

To: Clients of UR Medicine Labs

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Date: September 28, 2015

Mycoplasma pneumoniae commonly causes fever, malaise, headache and cough which can gradually progress to tracheobronchitis with severe cough and/or pneumonia. Epidemiological studies in large populations indicate a high incidence of pneumonia caused by *M. pneumoniae*. While the highest rates of infection are in children and young adults, neonates and older adults are also susceptible to infection with this organism. Although frequently self-limited, treatment with effective antibiotics can decrease length and severity of symptoms and may curb transmission to susceptible contacts.

For decades, laboratory diagnosis of infection caused by *M. pneumoniae* relied on culture which is specialized, slow and generally not available, and serology which lacks specificity and requires paired acute and convalescent sera for diagnosis. Even if these tests are performed, the turn-around-times are not suitable for treatment decision making. More recently, FDA-cleared nucleic acid amplification tests (NAAT) for diagnosis of infection caused by *M. pneumoniae* have become commercially available; NAAT results can facilitate clinical decision making due to their high sensitivity and specificity and availability within hours of specimen collection. The NAAT we will perform starting on October 5 is the *Illumigene*[®] *Mycoplasma* assay by Meridian Bioscience, Inc; this assay utilizes throat or nasopharyngeal swab specimens which are placed into UTM (universal transport medium) after collection prior to transport to the laboratory. The assay will be performed daily Monday thru Friday. Refer to the Test Index for specimen collection and transport details (<https://www.testmenu.com/rochester/Tests/590352>). For additional information contact Dwight J. Hardy by any of the methods listed above.