



**MEMORANDUM #151**

**TO:** UNC Hospitals Attending Physicians, Housestaff, Nursing Coordinators, Department Heads and Supervisors

**FROM:** <sup>MBM</sup> Melissa B. Miller, PhD, Director, Molecular Microbiology Laboratory  
<sup>PG</sup> Peter H. Gilligan, PhD, Director, Microbiology-Immunology Laboratory  
<sup>MC</sup> Herbert C. Whinna, MD, PhD, Director, McLendon Clinical Laboratories

**DATE:** November 4, 2013

**SUBJECT:** **2013-2014 Respiratory Viral Testing**

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Now that two cases of influenza have been detected, the Clinical Microbiology Laboratory would like to review the available options for respiratory viral testing at UNC Health Care.

The UNC Clinical Microbiology Laboratory offers several options for testing for influenza, RSV, and other respiratory viruses which can be reviewed here: [2013-2014 Respiratory Viral Testing](#). This pdf is also available on the Laboratories' Intranet home page (<http://labs.unchealthcare.org/>) under "Quick Links".

Note we offer a rapid influenza PCR test that is resulted within 90 min of receiving the specimen into the laboratory, and a combination RSV/influenza PCR tests that is resulted in 3 hours. Both tests are available 24/7.

The UNC Microbiology-Immunology Laboratory no longer offers/supports rapid antigen testing due to the poor performance characteristics (in both sensitivity and specificity) for both influenza and RSV antigen tests. This decision was made for RSV due to an extensive number of false positive antigen results that led to a "pseudo" outbreak locally. For influenza, the decision was made based on the poor detection of H1N1/09 (see: <http://www.ncbi.nlm.nih.gov/pubmed/19540158>) and poor positive predictive value in all but the peak season. Thus, rapid influenza testing is not useful during the time of the season when it would be most beneficial to clarify clinical suspicions (beginning/end of season).

Unfortunately rapid antigen tests for influenza and RSV have not been significantly improved upon, so our recommendation against rapid antigen testing has not changed. We recently evaluated a "new and improved" rapid antigen test for influenza. Our data showed sensitivities of 43% and 55% for influenza A and influenza B, respectively. We feel the cost of a potential poor outcome due to a false negative result far outweighs the advantages of the short time to result that rapid antigen tests offer.

Therefore, if off campus facilities choose to implement rapid antigen testing, we recommend the following: (1) consider sending positive specimens at the beginning of the season and the end of the season for molecular confirmatory testing, (2) consider sending all negative specimens, particularly in patients with a higher risk for influenza-related complications, for molecular confirmatory testing, and (3) follow the CDC recommended algorithms for rapid influenza testing ([http://www.cdc.gov/flu/professionals/diagnosis/clinician\\_guidance\\_ridt.htm](http://www.cdc.gov/flu/professionals/diagnosis/clinician_guidance_ridt.htm)).