

Testing Protocol for Respiratory Viruses

WellSpan Laboratory Services offers the following respiratory virus testing at all 4 main hospital laboratories for rapid turnaround.

- Influenza A/B and RSV Panel
- Respiratory Viral Panel (includes... adenovirus, *B. pertussis*, *B. parapertussis*, *C. pneumoniae*, Coronavirus, influenza A & B, metapneumovirus, *M. pneumoniae*, parainfluenza 1-4, rhinovirus/enterovirus, RSV)

Orders for specific individual viruses, or other viruses not included in the tests listed above are available to order and will be sent to a reference lab for testing.

Recommended testing is different depending on the time of year.

A. October-April (influenza season)

- (1) Patients presenting to the Emergency Department (ED) with influenza-like illness or respiratory symptoms and are being admitted to the hospital will be tested with the full respiratory virus panel (RVP) which includes influenza A, influenza B, respiratory syncytial virus, adenovirus, coronavirus, human metapneumovirus, human rhinovirus/enterovirus, parainfluenza 1-4, *Bordetella pertussis, Bordetella parapertussis, Chlamydophila pneumoniae*, and *Mycoplasma pneumoniae* (Biofire FilmArray Assay). It is important to identify patients with viral and/or bacterial agents that may require appropriate antimicrobial chemotherapy, specific infection control precautions or isolation, and to aid in cohorting patients if required.
- (2) Patients presenting to the Emergency Department (ED) with influenza-like illness or respiratory symptoms and are NOT being admitted to the hospital can be tested with the influenza A/B & RSV panel (Cepheid) or not tested at all. The administration of antiviral therapy (Tamiflu) can be based on clinical symptoms alone and does not require confirmatory testing.

- (3) Outpatients providers have several options when diagnosing respiratory infections in symptomatic patients presenting to their practice which include:
 (i) using a point-of-care (POC) rapid influenza A and B test which is approved by Wellspan POC (Wellspan Medical Groups only). Independent medical groups can use any rapid flu test of their choosing; (ii) sending a specimen to a Wellspan hospital-based laboratory for the influenza A/B & RSV panel; or (iii) choose not to perform any testing but rather administer antiviral therapy (Tamiflu) based on influenza-like symptoms alone.
- (4) Nursing Homes in the event of an outbreak of respiratory illness, test up to 6 symptomatic patients with the full RVP to determine the etiology agent (s) causing the outbreak. We have had several nursing home outbreaks during the 2017-2018 season due to influenza B and coronavirus co-infection. No need to test all residents. In addition, test any new resident coming into the facility with respiratory symptoms with the full RVP so that appropriate infection control measures can be taken.

B. May- September (NOT influenza season)

The full RVP should be used on all symptomatic patients that require testing during this time period since infections are more likely due to respiratory viruses other than influenza.

Date Submitted: July 9, 2018 Submitted by: Arthur E. Crist, Jr., Ph.D. Clinical/Technical Director Microbiology, Immunology, and Molecular Testing Wellspan Laboratory Services Ph: 717-851-2393 Email: acrist@wellspan.org