**Presentation and Collection**

**Symptoms of Respiratory Virus Infection**

1. Collect sample and place it in Universal Transport Media (UTM)
   a. For upper respiratory tract samples, a nasopharyngeal swab (NPSWAB) is preferred and is placed in UTM. Note: Nasal swabs may yield inferior results and should be avoided.
   b. For lower respiratory tract samples, place 1 mL bronchialveolar lavage (BAL) in UTM immediately.

2. Place UTM on wet ice for transport to laboratory.

**Populations Served**

- **High Risk/High Morbidity Population**
  1. Patients being admitted to Hospitals
  2. Patients being admitted to Observation Units
  3. High-risk Out-patients groups*

- **Lower Risk Population**
  1. Out-patients who are in Low Risk Group
  2. Emergency Room patients, not being admitted

**EPIC Test Order**

- **RESPIRATORY PATHOGEN PCR (Panel)**
  Test offered year round
  Real-time results to GHS ED Dashboards

- **Flu A/B and RSV (Abbreviated Panel)**
  Test offered Nov. 1 - April 30 in peak respiratory season at all hospitals and Rapid Response GRL laboratories

**GHS Standard**

- **LIS TEST NAME = RPPCR**
  Molecular testing full panel:
  adenovirus; coronaviruses 229E, HKU1, NL63, and OC43; rhinovirus; human metapneumovirus; influenza A (subtypes H1, 2009 H1, and H3); influenza B; parainfluenza virus types 1-4; RSV; Bordetella pertussis; Chlamydia pneumoniae; and Mycoplasma pneumonia.

  Performing laboratories: GMC, GWV, GCMC, GLH, GBH, and GSACH

- **LIS TEST NAME = ABRP**
  Molecular testing abbreviated panel: influenza A influenza B, RSV.

  Performing Hospital Laboratories: GMC, GWV, GCMC, GLH, GBH, GSACH, and GHSH.

  **GRL Rapid Response Sites**
  Gray’s Woods, Scenery Park, Moshannon Valley, Lewistown, Mount Pleasant, Mount Pocono, Tunkhannock, and Pottsville

For questions, please contact Microbiology Analytical Specialists: Barbara Heiter, B.S., MT(ASCP) at 570-214-4294, or Francis Tomaszewski, B.S., MT(ASCP) at 570-271-6185 or Doctoral directors at Pager 8600.

*Note: Exceptions to algorithm can occur after a laboratory waiver is received (call pager 8600)

During May 1- Oct 31: There is a rare chance of detecting influenza or RSV; for diagnostic purposes, the full molecular panel is standard. Rapid RSV antigen testing is not performed within GHS.

**Geisinger Careworks will offer rapid influenza antigen and back up negative samples for high risk groups by molecular methods, as warranted.**

* Groups at high risk for influenza complications
  - Children <2 years* and Adults 65 years of age
  - Persons with chronic pulmonary (including asthma), cardiovascular (except hypertension), renal, hepatic, hematologic (including sickle cell disease), metabolic (including diabetes mellitus), neurologic, neuromuscular, and neurodevelopmental disorders (including disorders of the brain, spinal cord, peripheral nerve and muscle such as cerebral palsy, epilepsy, stroke, intellectual disability [mental retardation], moderate to severe developmental delay, muscular dystrophy, or spinal cord injury) Immunosuppression (including immunosuppression caused by medications or by human immunodeficiency virus)
  - Women who are pregnant or postpartum (within two weeks after delivery)
  - Children <19 years of age and receiving long-term aspirin therapy
  - Native Americans and Alaskan Natives
  - Morbidly obese (body mass index [BMI] >40 for adults or BMI >2.33 standard deviations above the mean for children)
  - Residents of nursing homes and other chronic care facilities*

Although all children <5 years of age are considered to be at higher risk for complications of influenza, the highest risk is for those <2 years of age, with the highest hospitalization and death rates among infants <6 months of age.

Adapted from: Influenza Division, National Center for Immunization and Respiratory Diseases, CDC. Prevention and control of seasonal influenza with vaccines. MMWR Recomm Rep 2013; 62:1.