RESPView Pathogen Surveillance 2014-2015

- The predominant virus is influenza A, followed by rhinovirus and respiratory syncytial virus.
- Influenza activity is sharply increasing; those typed are nearly exclusively FluA H3.
- CDC Alert: 52% of the influenza A (H3N2) viruses collected and analyzed in the US from October 1 through November 22, 2014 are antigenically drifted from the vaccine strain, thus causing decreased vaccine effectiveness.

Please remember to use ABRP (FluA/B/RSV abbreviated PCR panel) for Outpatients and Emergency Room patients not being admitted. At GMC, nearly 50% of all RVPCRs on outpatients are influenza A-positive, which is detected by the ABRP assay. The algorithm on page 2 provides guidance for optimal stewardship of laboratory services.

For questions about respiratory pathogen testing, please contact Microbiology Technical Specialists, Lisa Scicchitano, B.S., MT(ASCP) at 570-214-4294, Francis Tomashefski, B.S., MT(ASCP) at 570-271-6185, Dr. Donna Wolk, MHA, Ph.D, D(ABMM), System Director, Clinical Microbiology at 570-271-7467 or Dr. Raquel Martinez, Ph.D, D(ABMM), Associate Director, Clinical Microbiology at 570-271-6338. **Questions:** For newsletter questions, contact Christy Attinger at (570) 271-6338.

“Make it the best.” - A. Geisinger
2014-2015 Approved Respiratory Pathogen Testing Algorithm
Geisinger Medical Laboratories, Danville, PA

**Symptoms of Respiratory Infection**
- All In-Patients, Emergency Room (ER) Admissions and Observation Units, and out-patients in high risk groups
- Out-patient with no high-risk conditions; ER patients not being admitted

**EPIC Test Order**
- **EPIC Order RVPCR** (#Full respiratory panel)
- **EPIC Order ABRP** (Abbreviated panel Influenza A/B and RSV only)
  - Test offered Nov. 1- April 30 in peak season for influenza A/B and RSV

**Age Decision**
- **Patient < 6 years old** (Nov. 1 – April 30)
  - Yes
  - **TEST RSV Rapid Ag** automatically performed when < 6yr, (all GHS sites) for IP or OP
  - **YES**
  - **No**
  - **OUT-patient, > 6yr**
  - **TEST RVPCR** Molecular testing, full panel

**GHS Standard**
- **POSITIVE In-Patient**
  - **TEST RVPCR** Molecular testing full panel
  - **TEST = RVPCR**
    - 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; Chlamydophila pneumoniae; and Mycoplasma pneumonia.
    - Performing laboratories: GMC, GWV, GCMC, and GBH. GSACH sent to GMC.
  - **TEST ABRP** (Abbreviated panel Influenza A/B and RSV only)
    - Influenza A influenza B, RSV (performed at GMC for all sites)

- **NEGATIVE In-Patient**
  - **TEST = ABRP**
    - Molecular testing abbreviated panel: influenza A influenza B, RSV (performed at GMC for all sites)

  - **TEST RVPCR** Molecular testing full panel

- **NEGATIVE Out-Patient**
  - **STOP**
  - No further testing
  - **TEST ABRP** (Abbreviated panel Influenza A/B and RSV only)

**RSV Results**
- **POSITIVE In-Patient**
  - **TEST RVPCR** Molecular testing full panel

- **NEGATIVE In-Patient**
  - **TEST RVPCR** Molecular testing full panel

- **POSITIVE Out-Patient**
  - **TEST RVPCR** Molecular testing full panel

- **NEGATIVE Out-Patient**
  - **STOP**
  - No further testing

**Abbreviations**
- URI = upper respiratory infection
- LRI = lower respiratory tract infection
- UTM = universal transport media w/ flocked swab
- NP = nasopharyngeal
- BAL = brochoalveolar lavage
- RSV = respiratory syncytial virus
- ED = Emergency Department

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*Note: Exceptions to algorithm can occur with laboratory waiver, e.g., patients in high risk groups

*May 1- Oct 31: rare chance of detecting influenza/ RSV; for diagnostic purposes, the full molecular panel is standard.

Resp Flow diag Nov thru Apr.vsd

dmwolk, rmartinez: 12/30/2013, rev 2/5/14, rev 11/07/14