Respiratory Pathogen Panel, NAAT Testing Update 2015-2016

Providence Health & Services Oregon Laboratories is pleased to announce the release of an expanded respiratory PCR panel for the 2015-2016 season, available October 28, 2015. **Respiratory Pathogen Panel, NAAT** will provide rapid, comprehensive detection of 14 viral and 3 bacterial respiratory pathogens including Influenza A, Influenza B, Respiratory Syncytial virus, Adenovirus, human Metapneumovirus, human Rhinovirus/Enterovirus, Parainfluenza virus types 1, 2, 3 & 4; Coronavirus HKU1, Coronavirus NL63, Coronavirus 229E, Coronavirus OC43, *Bordetella pertussis*, *Chlamydia pneumoniae*, *Mycoplasma pneumoniae*, and provide immediate subtyping for Influenza A/H1, A/H1-2009 and A/H3.

Clinical symptoms are similar for different respiratory illnesses. Our new PCR panel can provide rapid, sensitive and specific detection of the causative virus or bacterium and support patient-tailored therapy for improved clinical outcomes. This can be of particular significance in children, elderly, immune-compromised or weakened individuals (including those with chronic disease, cancer, or in intensive care). Rapid, accurate diagnosis may also help control outbreaks and prevent emergence of antibiotic resistance by allowing you to discontinue unnecessary antibiotic therapy in viral infections.

Implementation of the Respiratory Pathogen Panel, NAAT, will significantly reduce the turnaround time (TAT) of respiratory virus reporting since testing will be available in all Providence Oregon, hospital-based, Rapid Response Laboratories and the Regional Core Laboratory for nasopharyngeal swab samples submitted in Viral Transport Media (VTM). Requests for testing on alternate specimen types listed below will be accepted, but must be transferred to the Regional Core Laboratory for testing.

**Test Name:** Respiratory Pathogen Panel, NAAT  
**Epic Test Code:** LAB1307  
**Cerner Lab Test Code:** 99002

**Collect:**
- **Nasopharyngeal (NP) swab** (Dacron or rayon swabs with wire shafts) submitted in M4 or M5 Viral Transport Media (VTM) or equivalent (e.g. BD Universal Viral Transport, Copan Universal Viral Transport (UTM-RT) or Quest V-C-M Medium).
- **Bronchoalveolar lavage (BAL), Bronchial Wash, Sputum, Nasal Wash or Aspirate** submitted in sterile, leak-proof container.

**Storage/Transport Temperature:** Refrigerated (2-8°C)  
**Stability (from collection to initiation):** Ambient: 4 hours, Refrigerated: 3 days, Frozen: 30 days  
**Unacceptable Conditions:** Non-sterile and/or leaking containers

**Performed:** Sunday - Saturday  
**Reported:**
- **PHS Hospital RRL (NP swabs):** 2 to 4 hours  
- **PHS Core Laboratory:** 12 to 24 hours
**Methodology:** Multiplex Real-Time Polymerase Chain Reaction (PCR)

**CPT Codes:**
- **CPT 87633:** Adenovirus, Coronavirus 229E, Coronavirus HKU1, Coronavirus NL63, Coronavirus OC43, Human Metapneumovirus, Human Rhinovirus (1, 2, 3 and 4), Enterovirus, Influenza A (H1-2009, H1, H3), Influenza B, Parainfluenza (1, 2, 3, and 4), Respiratory Syncytial Virus
- **CPT 87798:** Bordetella pertussis
- **CPT 87486:** Chlamyphila pneumoniae
- **CPT 87581:** Mycoplasma pneumoniae

**Nasopharyngeal Swab Collection:** Appropriate nasopharyngeal swabs and Viral Transport Media (VTM) may be obtained from the PH&S Lab Supplies department at (503) 215-3484.

Select the thin, wire shaped swab for collection of nasopharyngeal swab specimens.

Tilt patient’s head to 70º angle.

Bend the flexible-shaft, wire swab so that it mimics the curve of the nasal airway and gently pass the swab through the nostril to the posterior nasopharynx (same distance as from nostril to external opening of ear). Gently rotate and leave the swab in place for up to 30 seconds. Repeat procedure with SAME swab in the second nostril. NOTE: Do not force swab - if an obstruction is encountered, try patient’s other nostril.

Place the swab in viral transport media (VTM). **Bend or cut the shaft so that lid can close securely without interfering with the thread on the rim. Failure to do so will result in sample leakage and the specimen will be rejected.**

**References**

For more information, please contact Providence Lab Services at (503) 215-6660 or the Regional Molecular Diagnostics Laboratory at (503) 893-7788.