TEST UPDATE: Influenza Type A/B, Molecular & Respiratory Virus Panel, Molecular

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PathGroup now offers molecular-based testing for the most common pathogens associated with respiratory tract infections. These tests are intended for the simultaneous detection and identification of multiple viral nucleic acids in individuals suspected of respiratory tract infection.

Because there are a wide array of known respiratory pathogens that can cause respiratory tract infections, it is often difficult to determine the optimal patient management based on clinical presentation alone. PathGroup will offer two distinct molecular-based tests to provide clinicians with both a targeted and broad-based testing approach, while also providing a cost-effective approach for patients given the recent shift to high-deductible healthcare plans.

**Influenza Type A/B, Molecular** (Test Code INFLUAB) will contain the following viral pathogens:
- Influenza A
- Influenza B
- Influenza A (subtype H1)
- Influenza A (subtype H3)

**Respiratory Virus Panel, Molecular** (Test Code RVPPCR) will contain the following viral pathogens:
- Influenza A
- Influenza B
- Influenza A (subtype H1)
- Human Metapneumovirus
- RSV A
- RSV B
- RSV A (subtype H3)
- RSV B (subtype H3)
- Parainfluenza 1
- Parainfluenza 2
- Parainfluenza 3
- Parainfluenza 4
- Rhinovirus

Patients who may be appropriate for this type of molecular-based testing include:
- Individuals who have tested negative on rapid testing methodologies but remain symptomatic
- Individuals in high-risk categories who exhibit significant symptomatology

Below is a quick overview of the pathogens available for testing:
- **Influenza A and B** – causative for Influenza.
- **Respiratory Syncytial Virus** (RSV) – one of the most common causes of bronchiolitis and pneumonia in infants and children.
- **Parainfluenza** – commonly identified in young children and is the causative agent for croup, bronchiolitis and pneumonia.
- **Adenovirus** – cause a wide range of illnesses.
- **Human Metapneumovirus** – a leading cause of bronchiolitis and lower respiratory tract infections in young children.
- **Rhinovirus** – associated with the common cold and lower respiratory tract infections.

**Influenza A and B** viral infections often result in the respiratory illness commonly referred to as the ‘flu’. Flu can lead to serious complications such as pneumonia, bronchitis, sinus infections, encephalitis, and a general worsening of chronic conditions. Flu is highly contagious and, according to the Centers for Disease Control...
and Prevention (CDC), an average of 20% of the population contract flu each year. Over 200,000 people are hospitalized, and between 3,000 and 49,000 people die of complications, depending on the severity of the flu season. Young children, the elderly, and patients with compromised cardiac, pulmonary, or immune systems are at greatest risk for serious disease. Laboratory identification of the virus responsible for a community epidemic or seasonal disease is helpful for selecting prophylactic treatments, which are now available for influenza virus.

A positive result is consistent with infection by the virus(es) detected. The use of additional laboratory testing and clinical presentation may be necessary to establish a final diagnosis of respiratory infection. A negative test result is consistent with the absence of infection but may also be due to RNA concentrations below the detection limit of the assay.

**ORDERING INFORMATION:**

<table>
<thead>
<tr>
<th>TEST CODE</th>
<th>TEST NAME</th>
<th>CPT</th>
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<tbody>
<tr>
<td>INFLUAB</td>
<td>Influenza Type A/B, Molecular</td>
<td>87631</td>
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<tr>
<td>RVPPCR</td>
<td>Respiratory Virus panel, Molecular</td>
<td>87633</td>
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**TEST METHODOLOGY:**
Reverse transcription (RT), polymerase chain reaction (PCR), and microarray hybridization on the Luminex Verigene™ system.

**SPECIMEN COLLECTION AND STORAGE:**

**Specimen Collection Device:**
Nylon or Rayon tipped nasopharyngeal swab (NPS) in Viral Transport Medium. An example is the BD Universal Swab (PathSupply Item # 13696.)

**Specimen Transport:**
Refrigerated. Specimens must be stored at 2-8°C (refrigerated) within 4 hours of collection, and transported refrigerated.

**Specimen Stability:**
2-8°C (refrigerated) for a total of 48 hours from time of collection before testing. Please ship within 24 hours of collection to ensure specimen stability and integrity.

**Unacceptable Conditions:**
- Specimens not in viral transport media.
- Specimens transported ambient.
- Specimens collected with cotton swabs.

**Test Performed:**
Monday – Saturday.

**Turnaround Time:**
24 Hours.

For further questions, please contact Client Services at 615-562-9300 or 1-888-474-5227.

**Reference:**