Respiratory Pathogen PCR Testing

As of 5th June 2019, there have already been a total of 69,380 laboratory confirmed notifications of influenza. Last year there were 58,570 confirmed influenza cases in Australia. Although we have already surpassed the total number for 2018, laboratory confirmed cases may not show the full extent of influenza as most people still don’t get tested.

Early confirmation is critical in ensuring timely clinical management along with minimising progression to a more serious illness.

Who is at risk of complications?
- Elderly people
- Children under 6 months old
- Pregnant women including up to 2 weeks post-partum
- People with chronic conditions or immunosuppression

Why test for respiratory virus?
Other respiratory viruses such as respiratory syncytial virus (RSV), human metapneumovirus and parainfluenza viruses have been associated with severe lower respiratory tract infection in children. There has also been a resurgence of RSV in the elderly due to waning immunity. It is not always easy to distinguish these infections based on a clinical picture.

The multiplex PCR to diagnose influenza and respiratory viral infections allows the clinician to have a quick and accurate diagnosis. This will enable the clinician to instigate earlier targeted treatment, avoiding inappropriate antibiotic therapy.
Respiratory Pathogen PCR
Testing at Clinical Labs

Our rapid respiratory viral assay is performed daily, 7 days a week during flu season. Our increased assay specificity and sensitivity improves the accuracy and speed of diagnosis.

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<th>Turnaround Time</th>
<th>24hrs – Urgent</th>
<th>&gt;24 hrs</th>
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| Tests included  | • Influenza A & B  
• RSV (A&B)  
• Parainfluenza 1, 2, 3, & 4  
• Human Metapneumovirus  
• Human Adenovirus  
• Human Rhinovirus  
| • Influenza A & B  
• RSV (A&B)  
• Parainfluenza 1, 2 & 3  
• Human Metapneumovirus  
• Human Adenovirus  
• Human Enterovirus/Rhinovirus Mycoplasma pneumoniae  
• Bordetella pertussis  
• Bordetella parapertussis  |

What to Request:  
Respiratory Viral Screen/Multiplex PCR  
Extended Multiplex PCR

Additional clinical tests recommended based on relevant symptoms:

- If you suspect a lower respiratory infection then the appropriate sample is sputum for MCS
- If the patient presents with pharyngitis symptoms then obtain a swab from the throat for culture

How to Order PCR Tests:

To assist the laboratory during flu outbreaks, please limit testing to suspected pathogens to ensure rapid result delivery (see table above)

- Samples required:
  - Nose/throat or nasopharyngeal swab(s) (must use dry flocked swab) or
  - Nasopharyngeal/tracheal aspirates or
  - Sputum

Cost: Medicare bulk billing available and subject to Medicare guidelines and criteria

Expert pathologist

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99.3% Sensitivity  
Specificity 98%