

Influenza Respiratory Virus testing Sullivan Nicolaides Pathology 2009

We wish to advise you that Queensland Health has released new recommendations regarding patient groups for which influenza testing is recommended.

New Testing Recommendations

Now that there is widespread community infection and the predominant strain is Human Swine H1N1, diagnostic testing becomes less useful. The pre-test probability of a patient with a lower respiratory tract infection (LRTI) having influenza A and specifically Human Swine H1N1 is very high. A clinical diagnosis and pre-emptive empirical therapy, if in a vulnerable at risk group, is recommended. Otherwise the patient should be advised to remain quarantined for up to a week after onset of symptoms.

Currently Queensland Health recommendations are to test symptomatic

1. Pregnant woman
2. Aboriginal and Torres Strait Islanders
3. Hospitalised patient with respiratory symptoms
4. Health Care workers.

Non hospitalised patients with chronic illness and LRTI can, in the main, be diagnosed clinically and treated pre-emptively.

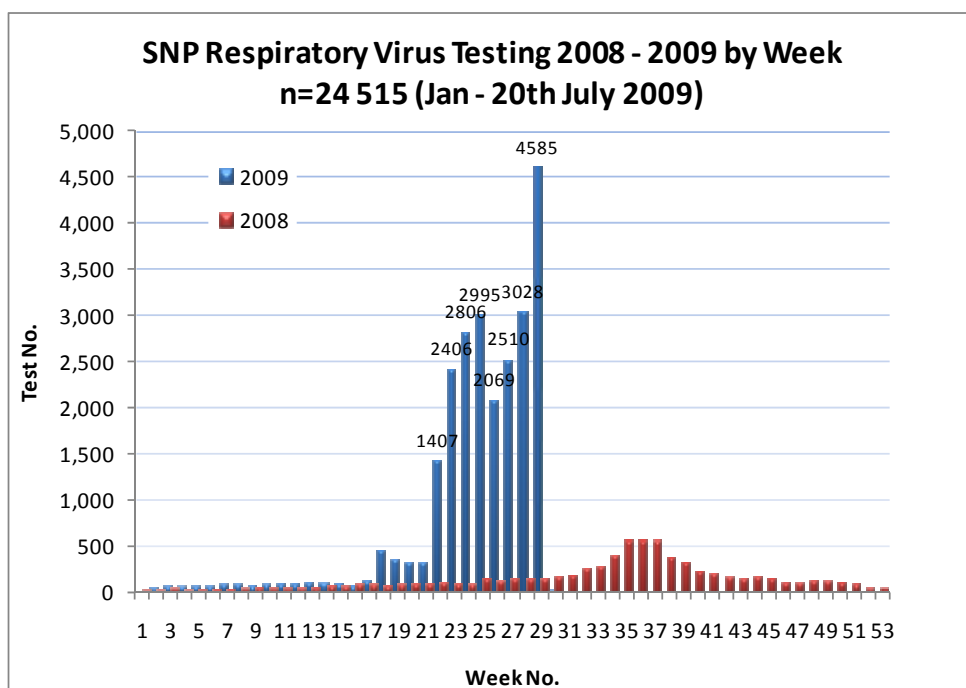
Status of testing for influenza A at Sullivan Nicolaides Pathology is shown below.

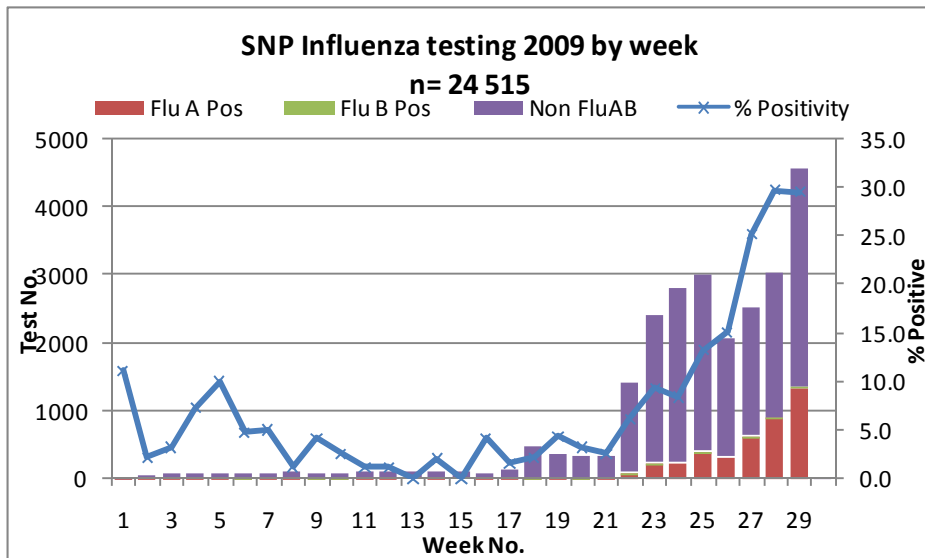
Turn around times

The extraordinary demand for testing means that turnaround times for Influenza PCR results has blown out to 48 - 72 hours. Subtyping results may take another 1-3 days. Urgent specimens are not able to be adequately prioritized because of the huge volume of specimens. If your patient belongs to one of the groups listed previously marking this on the request form will help ensure that these specimens are dealt with more urgently.

Antivirals

Unlike seasonal H1N1 which during the 2008 winter season was 98% resistant to oseltamivir (although remained sensitive to zanamivir), Human Swine H1N1 remains susceptible to antivirals. There are 3 single case reports of resistance to oseltamivir from Hong Kong, Denmark and Japan. Susceptibility to antivirals will be closely monitored.





Approximately 30% of all specimens submitted are positive for Influenza A and this percent positivity is increasing daily. Typing of Influenza A indicates that seasonal H1N1 and H3N2 Influenza have been replaced by Human Swine H1N1 with over 85% of our positive Influenza A results being due to Human Swine H1N1.

Subtyping

In order to expedite subtyping of positive Influenza A specimens our laboratory has developed a sensitive and specific assay for Human Swine H1N1. The small number of patients that are Influenza A positive and Human Swine H1N1 negative are currently referred to Queensland Health Scientific Services to confirm the presence of seasonal H1N1 or H3N2. In the next couple of weeks as Human Swine H1N1 becomes the dominant strain, this second round of testing is likely to cease and only a sample of positive specimens will be forwarded to Queensland Health Scientific Services who liaise with the WHO Influenza Reference Laboratory in Melbourne. Sensitivity to oseltamivir and zanamivir will be monitored.

Direct Antigen Testing

Rapid antigen tests have a sensitivity of only 40-60% and therefore are now generally not performed or only when specifically requested. Specimens from country laboratories, where delays in transport may be an issue, may on occasions undergo direct antigen testing.

I encourage you to contact me or any of the SNP Microbiologists to discuss any concerns you may have with regards to testing for Influenza testing.

