

NSW Influenza Surveillance Report

31 April to 6 May 2005

Issued 16 May 2005

Summary

This is the first weekly influenza report for 2005. Influenza like illness activity reported by General Practitioners and Emergency Departments is low and is usual for this time of year. Laboratories reported little influenza this week. Respiratory Syncytial Virus (RSV) was the most commonly identified respiratory virus.

Background

Influenza is highly contagious and mainly caused by influenza viruses A and B. The virus is spread from person to person through droplets when an infected person coughs or sneezes. Symptoms include a sudden onset of fever, headache, muscle and joint pain, tiredness, sore throat, cough and runny or stuffy nose. Symptoms usually appear within one to three days of being infected, and a person is contagious for three to four days. Up to 30 per cent of the community could catch influenza each year. In recent years, influenza season has peaked any time from July to September.

People with influenza should help prevent its spread by resting at home while sick, covering their nose and mouth when they cough or sneeze, and regularly washing their hands with soap and running water. Influenza can be prevented by annual vaccination. Vaccination is available from general practitioners.

Methods

The NSW Influenza Surveillance Program runs from May to September each year. Data sources for 2005 include reports of:

- influenza-like illness (ILI) by selected NSW general practitioners (GPs) from Sydney South West (Eastern Zone), South East Sydney/Illawarra, Sydney West (Penrith) and Greater Western Area (Dubbo)
- ILI from 15 Emergency Departments across the Greater Sydney Area (Blacktown, the Children's Hospiatl at Westmead, Concord, Gosford, Mount Druitt, Prince of Wales, Royal Prince Alfred, Wollongong, Shellharbour, Shoalhaven, St George, St Vincent's, Sydney Hospital, Sydney Children's and Westmead Hospitals)
- laboratory diagnoses of respiratory viral infections by six major public laboratories (SEALS, ICPMR, SWAPS, PaLMS, HAPS and CHW)
- international and national influenza activity regularly from the WHO Collaborating Centre for Reference and Research on Influenza, Melbourne
- the National Notifiable Diseases Surveillance System, Australian Department of Health and Ageing.

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The surveillance program monitors general **trends** in influenza rather than the total number of people who are infected each year.

GP Sentinel Surveillance

Reports were received from 11 sentinel GPs for the period of this report. Fifteen cases of ILI were reported among 642 consultations (rate 9.3 per 1000 consultations). This rate is similar to that reported for the same period last year (rate 8.5 per 1000 consultations) (see Figure 1 on page 4 and Table 1 on page 5).

Emergency Departments

Reports were received from 15 emergency departments. Six cases of ILI were reported among 9562 presentations (rate 0.6 per 1000 presentations). This rate is similar to that reported for the same period last year (rate 1.0 per 1000 presentations) (see Figure 1 on page 4 and Table 1 on page 5).

Laboratory surveillance

Virological

The six laboratories reported testing 350 respiratory samples. One sample was positive for influenza A by direct immunofluorescence (DIF) (rate 0.3 per 100 samples). There were no samples positive for influenza A for the same period last year. This week, one sample tested positive for influenza B by DIF (rate 0.3 per 100 samples). For the same period last year, no samples tested positive for influenza B. Sixty-three samples were positive for RSV (50 by DIF and 13 by culture), (rate 18.0 per 100 samples). This rate is higher than that reported for the same period last year (rate 15.8 per 100 samples) (see Figure 2 on page 4 and Table 2 on page 5).

Serological

The six participating laboratories tested 122 samples for respiratory viruses. Two samples had a single high serological titre for influenza A (rate 1.6 per 100 samples). No samples tested positive for influenza A for the same period last year. This week, no samples tested positive for influenza B or RSV. For the same period last year, four samples tested positive for influenza B (rate 4.0 per 100 samples), no samples were positive for RSV (see Figure 2 on page 4 and Table 2 on page 5).

International and national perspective

The United Kingdom experienced low levels of influenza activity throughout the 2004/2005 season. Clinical activity increased, slowly peaking late in the season (January to March). Rates for influenza and influenza-like illness remained close to or below baseline levels. A/Wellington/1/2004(H3N2)-like viruses were identified as the dominant strains. Detections of influenza B occurred late in the season representing 15 per cent of all isolates.

Internationally, the most significant events this season have been the:

- continuing poultry outbreaks of avian influenza A (H5N1) in South East Asia associated with sporadic cases/small clusters of human infection. See the <u>WHO website</u>.
- accidental distribution and subsequent destruction of virus panels containing the influenza A/Japan/305/57 H2N2 strain, similar to the one that caused the 1957-58 influenza pandemic. See the <u>WHO website</u>.



Related information

What is Influenza? http://www.health.nsw.gov.au/public-health/cdscu/facts/pdf/influenza.pdf

World Health Organization's (WHO) recommendations on the composition of vaccines for 2004 Southern Hemisphere season http://www.influenzacentre.org/

WHO Collaborating Centre for Reference and Research on Influenza, Melbourne http://www.influenzacentre.org/

National Notifiable Diseases Surveillance System, Australian Department of Health and Ageing http://www1.health.gov.au/cda/Source/CDA-index.cfm

World Health Organisation http://www.who.int/csr/disease/influenza/update/en/



Figure 1
Rate of influenza-like illness diagnosed in people presenting at Sentinel General Practices and emergency departments in NSW – 1 January 2002 to 6 May 2005

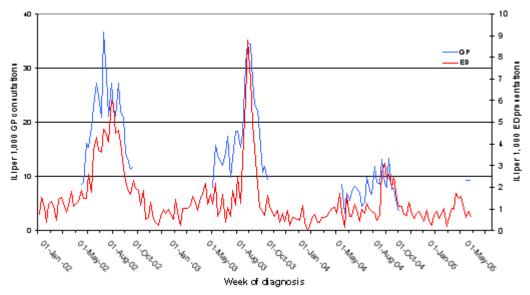


Figure 2

Rate of influenza virus detection by six major public laboratories in NSW - 1 May 2002 to 6 May 2005

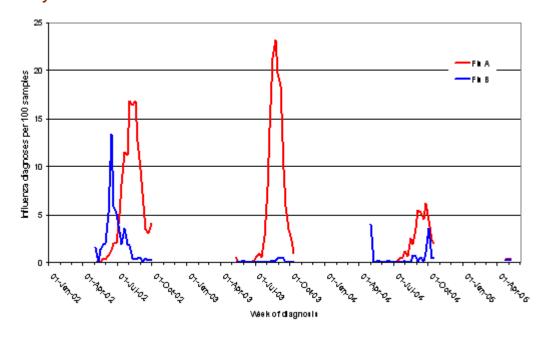


Table 1

Influenza-like illness reports from Sentinel General Practices and select hospital emergency departments in NSW – 31 April to 6 May 2005

Note: * Unable to calculate rate as no denominator given

GP Surveillance figures and Emergency Department data are preliminary and may be updated in later weeks.

Data Source	w/e 06 May
Sentinel GP Surveillance (N=GPs)	(11)
	Rate/1000
Greater Western Area (Dubbo)	*
South Eastern Sydney/Illawarra	20.3
Sydney South West (Eastern zone)	1.2
Sydney West Area (Penrith_	0.7
Overall rate of ILIs per week	16.0
ED surveillance	0.6

Table 2Laboratory reports of respiratory virus infection diagnosis in NSW – 31 April to 6 May 2005

Public Laboratory Surveillance	w/e 06 May
	No. pos.
Virology (specimens tested)	(350)
Influenza A	1
Influenza B	1
Adenovirus	7
Para 'flu 1	5
Para 'flu 2	0
Para 'flu 3	1
RSV	63
Rhinovirus	4
Serology (specimens tested)	(122)
Influenza A	2
Influenza B	0
Adenovirus	0
Para 'flu 1	1
Para 'flu 2	0
Para 'flu 3	1
RSV	0
Rhinovirus	0

This report was prepared by Communicable Diseases Branch, NSW Department of Health, in collaboration with participating general practitioners from Central Sydney, Corrections Health, New England, Southern and Wentworth Public Health Units, NSW Emergency Department Data Collection (HOIST), NSW Real-time Emergency Department Surveillance System (Centre for Epidemiology and Research, NSW Department of Health), South East Area Laboratory Service (SEALS), Institute of Clinical Pathology and Medical Research (ICPMR), South West Area Pathology Service (SWAPS), Pacific Laboratory Services (PaLMS), Hunter Area Pathology Service (HAPS), New Children's Hospital (CHW).

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