



AUSTRALIAN INFLUENZA SURVEILLANCE SUMMARY REPORT

**No.32, 2009, REPORTING PERIOD:
12 December 2009 – 18 December 2009**

This is a summary version of the weekly Australian Influenza Surveillance Report.

The Department of Health and Ageing acknowledges and greatly appreciates the providers of the many sources of data used to collate this report and to inform public health decisions regarding influenza.

Summary

- As at 18 December 2009, there have been 37,537 confirmed cases of pandemic (H1N1) 2009 and 191 deaths reported in Australia.
- National influenza activity remains low and steady.
 - Influenza-like illness (ILI) presentation rates to General Practitioners at a national level were below the baseline levels reached at the end of the 2007 and 2008 influenza seasons.
 - ILI presentations to emergency departments (EDs) remained steady, and slightly above background levels.
 - FluTracking surveillance for the week ending 13 December 2009 indicated that ILI activity remained at low levels in all participating jurisdictions.
 - Enquiries to the National Health Call Centre Network (NHCCN) regarding ILI continued to drop and were at low levels.
 - Absenteeism rates remained similar to levels seen at the same time in 2007 and 2008.
- As at 13 December 2009, the WHO Regional Offices reported at least 10,582 deaths associated with pandemic (H1N1) 2009 worldwide. In the northern hemisphere, transmission of pandemic influenza virus remains active and geographically widespread, however disease activity has peaked or passed its peak in many places, particularly North America. Influenza activity continues to increase in later affected areas of south-eastern and central Europe, and in central and south Asia. To date, WHO reported that 136 oseltamivir resistant pandemic (H1N1) 2009 viruses had been detected and characterised worldwide. All of these isolates showed the same H275Y mutation but all were sensitive to zanamivir. For further information, see http://www.who.int/csr/don/2009_12_18a/en/index.html.

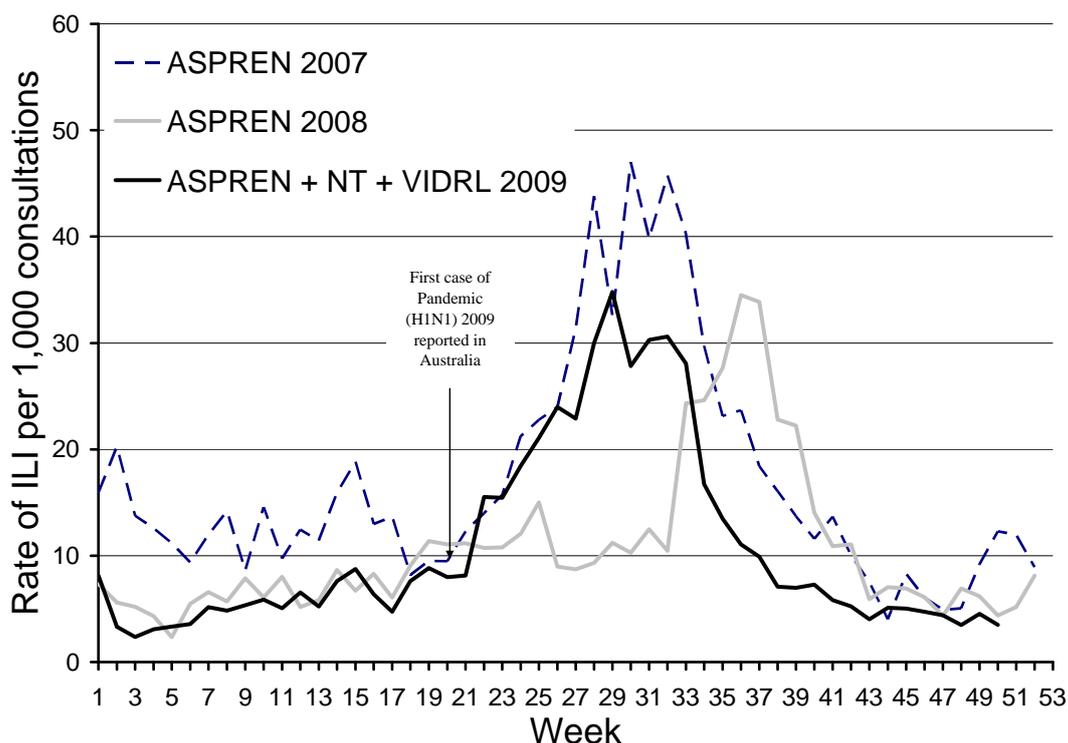
1. Influenza activity in Australia

Sentinel General Practice Surveillance

Combined data available from the Australian Sentinel Practices Research Network (ASPREN), the Northern Territory GP surveillance system and VIDRL, up until 13 December 2009, show that nationally, influenza like illness (ILI) consultation rates remained stable this reporting period, and are below levels seen at the end of the 2007 and 2008 seasons (Figure 1).

In the last week, the presentation rate to sentinel GPs in Australia was approximately 4 cases per 1,000 patients seen.

Figure 1. Weekly rate of ILI reported from GP ILI surveillance systems from 2007 to 13 December 2009*



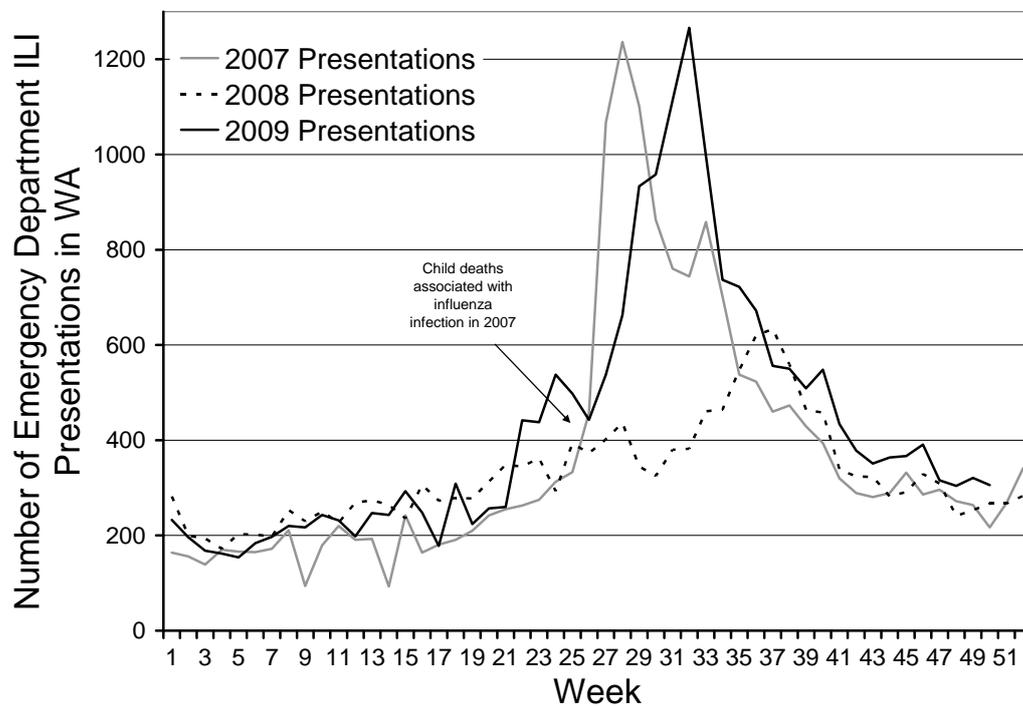
* Delays in the reporting of data may cause data to change retrospectively. As data from the NT and the VIDRL surveillance systems are combined with ASPREN data, rates may not be directly comparable across 2007, 2008 and 2009.

SOURCE: ASPREN, NT, VIDRL

WA emergency departments

The number of ILI presentations reported in Western Australian EDs remained steady during this reporting period and is above levels seen at the same time in 2007 and 2008 (Figure 2).

Figure 2. Number of Emergency Department presentations due to ILI in Western Australia from 1 January 2007* to 13 December 2009 by week



* In early July 2007 (week 26), several deaths associated with influenza infection were reported in children from Western Australia. The public response to these deaths could account for the sudden increase in ILI presentations to Perth EDs in 2007.

Source: WA 'Virus Watch' Report

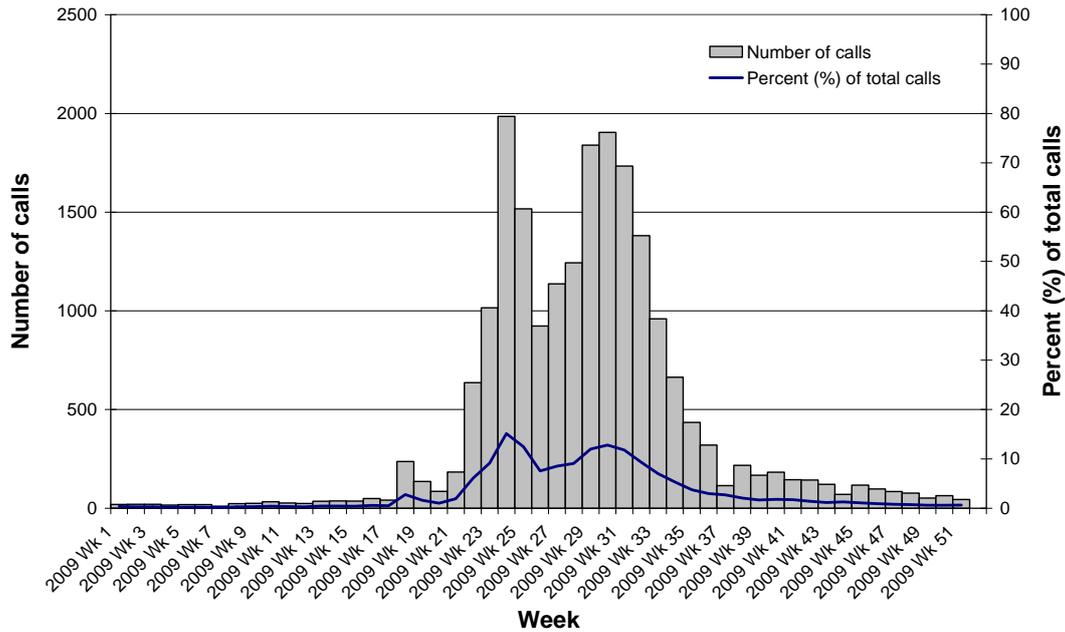
Flutracking

Flutracking, a national online tool for collecting data on ILI, reported that activity remained at low levels both nationally and at the State level in the week ending 13 December 2009.

National Health Call Centre Network

The number of calls related to ILI to the National Health Call Centre Network (NHCCN) remained stable, with 45 calls in the week ending 18 December 2009. At the peak, the NHCCN received approximately 1900 ILI-related calls per week. The number of calls currently being received is low but not yet at pre-pandemic levels (Figure 3).

Figure 3. Number of calls to the National Health Call Centre Network (NHCCN) related to ILI, Australia, 1 January 2009 (Wk1) to 18 December 2009 (Wk51)*



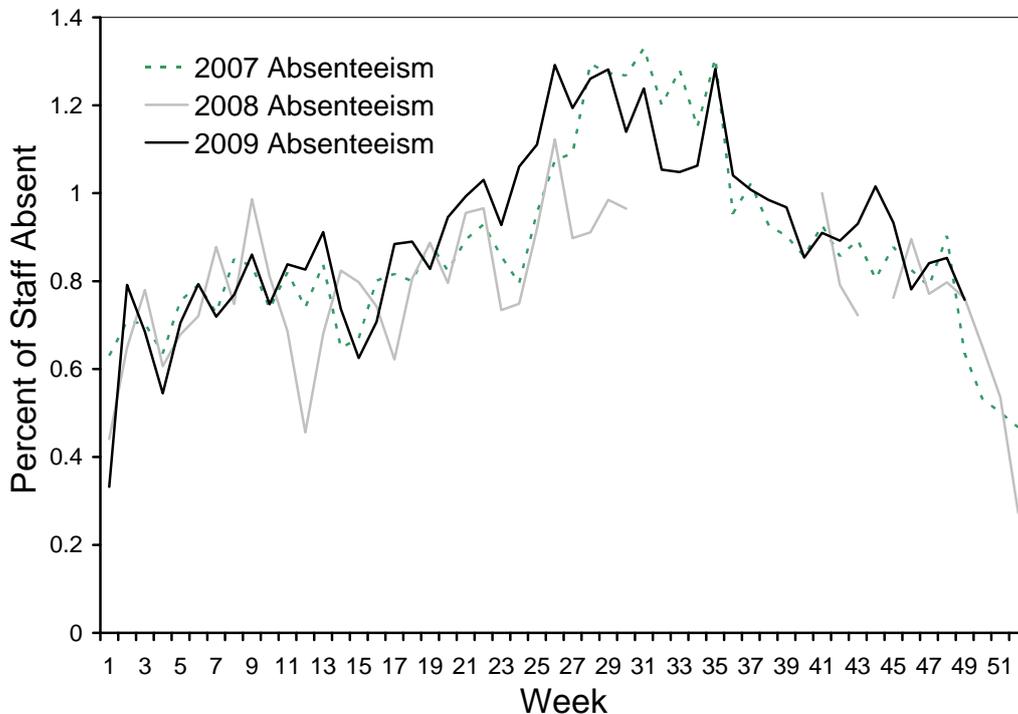
*Data in the most recent week are incomplete and will update retrospectively.

SOURCE: NHCCN data

Absenteeism

The most recent available data indicates that in the week ending 9 December 2009, absenteeism rates declined nationally and are at similar levels to those seen at the same time in 2007 and 2008 (Figure 4).

Figure 4. Rates of absenteeism of greater than 3 days absent, National employer, 1 January 2007 to 9 December 2009, by week.



SOURCE: Absenteeism data (Employer not disclosed)

2. Overview of pandemic (H1N1) 2009 severity - to 20 November 2009^a

While pandemic (H1N1) 2009 is generally considered a mild disease at the community level, it has had serious consequences at the acute end of the disease. Figures of hospitalisations, ICU admissions and deaths are currently used as indicators to provide evidence on the severity of the disease in Australia (Table 1).

Table 1. Summary of severity indicators of pandemic (H1N1) in Australia, to 20 November 2009^c

	Confirmed pandemic (H1N1) 2009 cases	Hospitalised cases	ICU cases	Deaths
Total number	37,269	13% (4,855/37,269 confirmed cases)	13% (655/4,855 hospitalisations)	190
Crude rate per 100,000 population	174.4	22.7	3.1	0.9
Median age (years)	21	31	40	48
Females	51% (18,968/37,141)	51% (2,468/4,855)	54% (351/655)	44% (84/190)
Vulnerable groups (Indigenous, pregnant & individuals with at least 1 co-morbidity)	n/a	51% (2,471/4,855)	74% (483/655)	68% (129/190)
Indigenous people~	11% (3,830/34,457)	21% (807/3,928)	20% (100/505)	13% (25/190)
Pregnant women*	n/a	27% (280/1,034 hospitalised females aged 15-44 years)	17% (47/280 hospitalised pregnant women)	4% (3/84 female deaths)
Cases with at least 1 co-morbidity	n/a	49% (2,395/4,855)	70% (459/655)	64% (121/190)

[#]Data are extracted from a number of sources depending on the availability of information. Figures used in the analysis have been provided in parentheses. Data is not always complete for each summarised figure.

~The denominator for this row is the number of confirmed cases for which Indigenous status is known.

* Includes women in the post-partum period.

^a Note that while the analysis of severity is on-going, updates are only reported every four weeks unless there are significant changes detected. With the current low levels of pandemic (H1N1) 2009 activity in Australia it is anticipated that the indicators of pandemic severity will not vary significantly.

6. Data considerations

The information in this report is reliant on the surveillance sources available to the Department of Health and Ageing. As access to sources increase and improve, this report will be refined and additional information will be included.

This report aims to increase awareness of pandemic (H1N1) 2009 and seasonal influenza in Australia by providing an analysis of the various surveillance data sources throughout Australia. While every care has been taken in preparing this report, the Commonwealth does not accept liability for any injury or loss or damage arising from the use of, or reliance upon, the content of the report. Delays in the reporting of data may cause data to change retrospectively. For further details about information contained in this report please contact the Influenza Team through flu@health.gov.au.

Sentinel General Practice Surveillance

The Australian Sentinel Practices Research Network (ASPREN) has Sentinel GPs who report influenza-like-illness (ILI) presentation rates in NSW, SA, ACT, VIC, QLD, TAS and WA. As jurisdictions joined ASPREN at different times and the number of GPs reporting has changed over time, the representativeness of ASPREN data in 2009 may be different from that of previous years. ASPREN data are sent to the Surveillance Branch on a weekly basis. Northern Territory GP surveillance data are sent to the Surveillance Branch on a weekly basis. VIDRL influenza surveillance data are sent to the Surveillance Branch on a weekly basis.

Sentinel Emergency Department (ED) data

WA - ED surveillance data are extracted from the 'Virus Watch' Report. This report is provided weekly. The Western Australia Influenza Surveillance Program collects data from 8 Perth Emergency Departments (EDs).

Absenteeism

A national organisation provides data on the number of employees who have been on sick leave for a continuous period of more than three days. These data are not influenza or ILI specific and absenteeism may be a result of other illnesses.

National Health Call Centre Network

A national organisation provides call centre data for calls relating to ILI or influenza. Data are provided daily and are collated weekly and have been presented in this report to show the pattern of calls to this Call Centre over the 2009 season.

FluTracking

FluTracking is a project of the University of Newcastle, the Hunter New England Area Health Service and the Hunter Medical Research Institute. FluTracking is an online health surveillance system to detect epidemics of influenza. It involves participants from around Australia completing a simple online weekly survey, which collects data on the rate of ILI symptoms in communities.

Data have been provided weekly and have been presented in this report to show the pattern of self reported ILI in the community over the 2009 season.

Further information on FluTracking is available at www.flutracking.net/index.html.