



AUSTRALIAN INFLUENZA SURVEILLANCE SUMMARY REPORT

No.33, 2009, REPORTING PERIOD:
19 December 2009 – 1 January 2010

This is a summary version of the weekly Australian Influenza Surveillance Report reporting data on the last 2 weeks of 2009.

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 1 January 2010, there have been 37,553 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.
 - Enquiries to the National Health Call Centre Network (NHCCN) regarding ILI remained stable and were at low levels.
 - Absenteeism rates remained similar to levels seen at the same time in 2007 and 2008.
- As at 27 December 2009, the WHO Regional Offices reported at least 12,220 deaths associated with pandemic (H1N1) 2009 worldwide. The most active areas of pandemic influenza transmission in the Northern Hemisphere are in Central and Eastern Europe, while overall disease activity has peaked in Western Europe, North America, and Asia. In the Southern Hemisphere, sporadic cases of pandemic influenza continued to be reported without evidence of sustained community transmission. To date, WHO reported that 168 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_30/en/index.html.

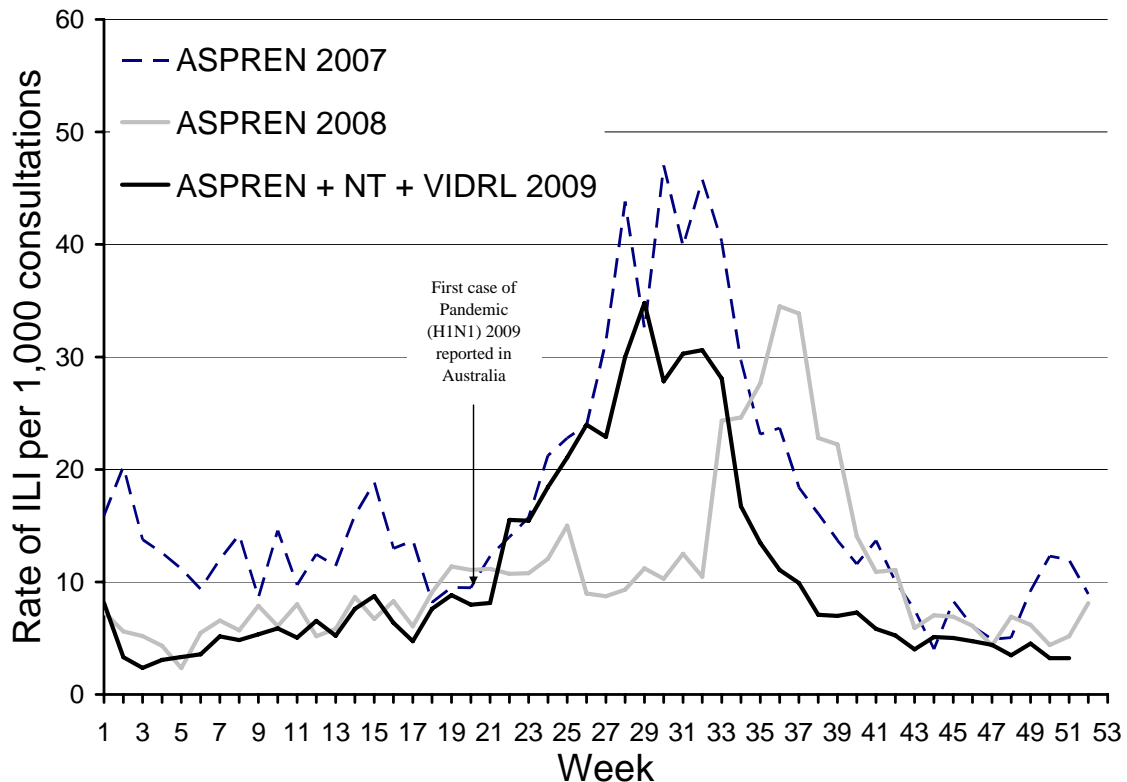
1. Influenza activity in Australia

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 20 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 3 cases per 1,000 patients seen.

Figure 1. Weekly rate of ILI reported from GP ILI surveillance systems from 2007 to 20 December 2009*



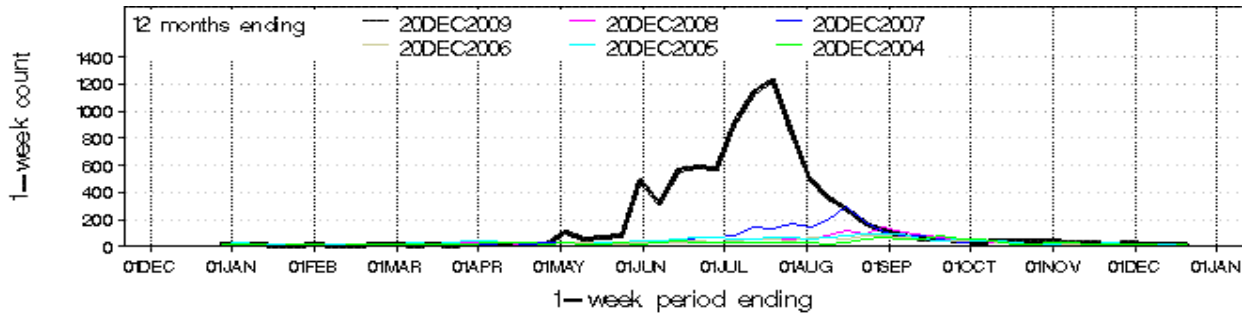
* Delays in the reporting of data may cause data to change retrospectively. As data from the NT and the VIDRL surveillance systems are combined with ASPREN data, rates may not be directly comparable across 2007, 2008 and 2009.

SOURCE: ASPREN, NT, VIDRL

NSW emergency departments

In December 2009, there were 88 presentations to NSW EDs with ILI (Figure 2). This is below levels seen in November 2009 (116 presentations) but higher than in December 2008 (75).

Figure 2. Comparison of weekly ILI presentations to NSW emergency departments, 2003-2009*



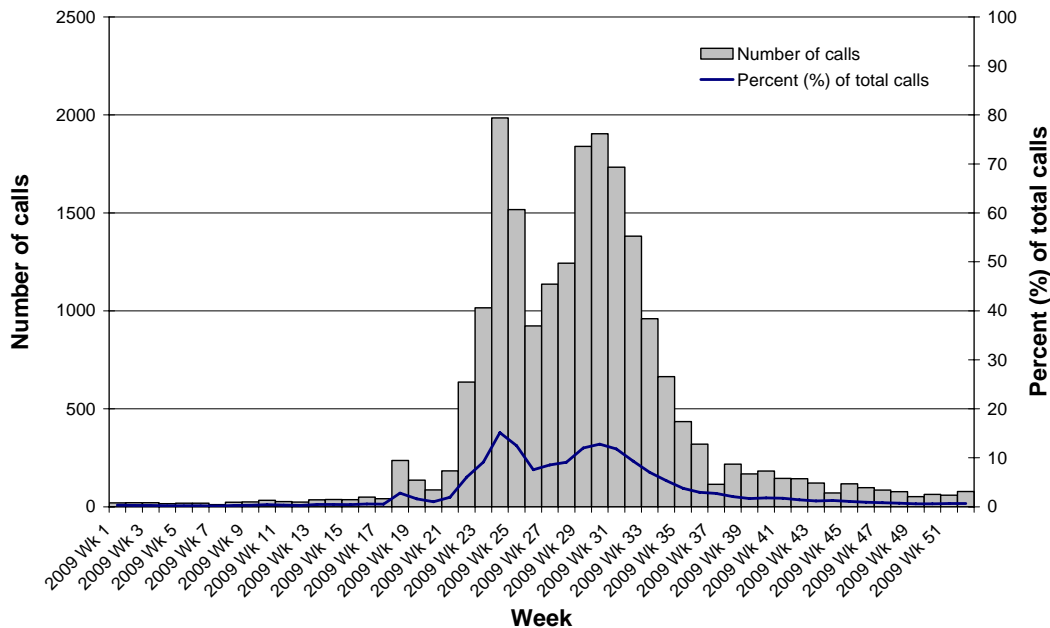
*Emergency department data are preliminary and may be updated in later weeks.

Source: NSW Health 'Influenza Monthly Epidemiology Report'

National Health Call Centre Network

The number of calls related to ILI to the National Health Call Centre Network (NHCCN) remained stable, with 38 calls in the week ending 1 January 2010. 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 1 January 2010 (Wk53)*



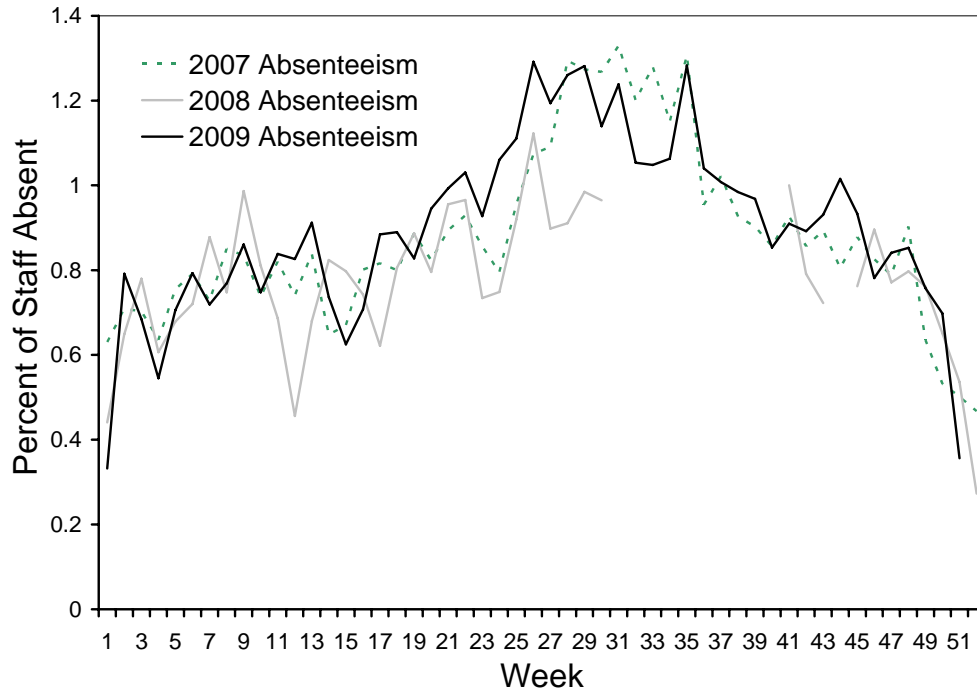
*Data in the most recent week are incomplete and will update retrospectively.

SOURCE: NHCCN data

Absenteeism

The most recent available data indicates that in the week ending 23 December 2009, absenteeism rates declined nationally and are at background levels (Figure 4).

Figure 4. Rates of absenteeism of greater than 3 days absent, National employer, 1 January 2007 to 23 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)

^aData 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 the 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

NSW - ED surveillance data are extracted from the 'Influenza Monthly Epidemiology Report, NSW'. This report is provided monthly. The New South Wales Influenza Surveillance Program collects data from 49 EDs across New South Wales.

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.