



**No. 19, 2010, REPORTING PERIOD:  
8 May 2010 – 14 May 2010**

The Department of Health and Ageing acknowledges the providers of the many sources of data used in this report and greatly appreciates their contribution.

### Key Indicators

The counting of every case of pandemic influenza is no longer feasible in the PROTECT phase. Influenza activity and severity in the community is instead monitored by the surveillance systems listed below.

<b>Is the situation changing?</b>	Indicated by laboratory confirmed cases reported to NetEpi and/or National Notifiable Diseases Surveillance System (NNDSS); GP Sentinel influenza-like illness (ILI) Surveillance; and emergency department (ED) presentations of ILI at sentinel hospitals (New South Wales and Western Australia). Laboratory data are used to determine the proportion of pandemic (H1N1) 2009 influenza circulating in the community.
<b>How severe is the disease, and is severity changing?</b>	Indicated by number of hospitalisations, ICU admissions and deaths from sentinel hospital surveillance as well as emergence of more severe clinical picture in hospitalised cases and ICU admissions.
<b>Is the virus changing?</b>	Indicated by emergence of drug resistance or gene drift or shift from laboratory surveillance.

### Summary

- Levels of influenza-like illness (ILI) in the community show signs of increasing through some surveillance systems (WA and NSW Emergency Departments, Flutracking).
- Reporting from laboratories suggests that little of this community ILI is due to influenza. Respiratory syncytial virus was the most common respiratory virus diagnosed by NSW sentinel laboratories in the last reporting period, parainfluenza-1 and 2 in WA and picornavirus in VIC.
- Of the 679 confirmed cases of influenza diagnosed during 2010 up to 14 May, 10% have been sub-typed as pandemic (H1N1) 2009, 76% as type A not sub-typed (likely to be mostly pandemic influenza), 0.9% as A/H3N2 and 9% have been characterised as type B.
- Sentinel hospitals have reported no hospitalisations during this period, and ANZICS reported no ICU admissions for influenza A.
- In 2010, there have been 68 confirmed cases of pandemic (H1N1) 2009 influenza reported in Australia, bringing the total of confirmed cases to 37,704 since May 2009. There have been no new confirmed cases of pandemic (H1N1) 2009 influenza diagnosed and reported in Australia during this reporting period.
- Pandemic (H1N1) 2009 influenza virus accounted for 85% of all influenza A viruses subtyped globally in the last reporting period. Seasonal Influenza B viruses are now predominant in the Russian Federation, China, Hong Kong, the Republic of Korea and Iran.
- In China, influenza B accounted for 91% of influenza viruses detected in the week to 9 May 2010. Of these, approximately 47% are the same strain as that in the 2010 Southern Hemisphere vaccine.
- As at 2 May 2010, the WHO Regional Offices reported over 18,026 deaths associated with pandemic (H1N1) 2009 influenza worldwide. In the Northern Hemisphere, the areas of highest transmission are in parts of West Africa, the Caribbean, South and Southeast Asia.

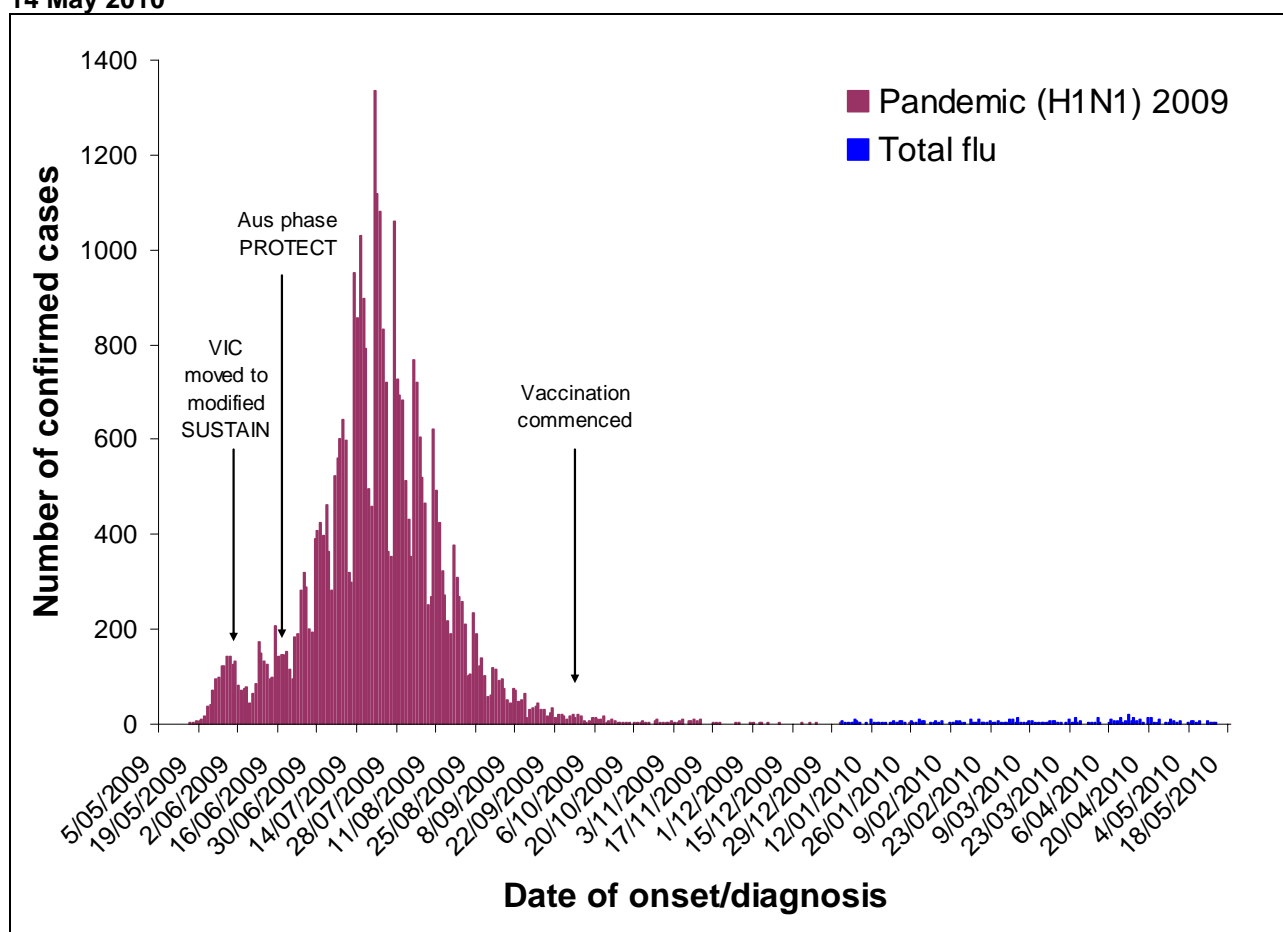
## 1. Influenza activity in Australia

### Laboratory Confirmed Cases

Pandemic influenza activity remains low and sporadic cases of pandemic influenza continue to be reported without evidence of sustained community transmission (Figure 1). There were two laboratory confirmed pandemic (H1N1) 2009 cases diagnosed during this reporting period, both in SA.

In the same period, there have been 20 confirmed cases of influenza. They included 15 of type A not sub-typed (8 in Qld, 4 in NSW, 2 in WA and 1 in NT) and three untyped in WA.

**Figure 1. Laboratory confirmed cases of pandemic (H1N1) 2009 and total influenza in Australia, to 14 May 2010**



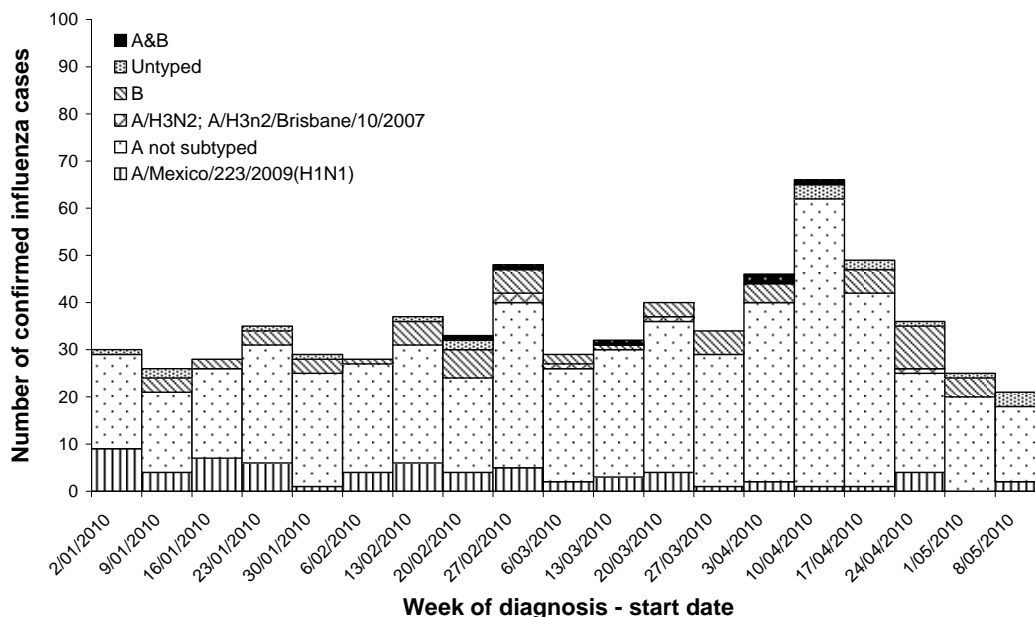
Note: Total influenza series starts on 1 January 2010.

Source: NetEpi (2009; NSW 2010) and NNDSS (2010)

There have been 679 confirmed cases of influenza of all types diagnosed during 2010 up to 14 May. Of those, 68 (10%) have been sub-typed as pandemic (H1N1) 2009, 518 (76.3%) as influenza type A not sub-typed and 6 (0.9%) as A/H3N2. A further 63 (9.3%) have been characterised as influenza type B and 18 (2.6%) have been untyped (Figure 2).

Influenza type A not further sub-typed is the predominant type in Australia to date this year. While it is expected that the majority of this will be pandemic (H1N1) 2009, these cases have a higher age profile (median age 45 years) than cases confirmed as the pandemic (H1N1) 2009 strain (28.5 years in 2010). The proportion of women diagnosed with Influenza type A not further sub-typed is also higher (50%) compared to that diagnosed with the pandemic (H1N1) 2009 strain (45.6% in 2010).

**Figure 2. Laboratory confirmed cases of influenza (pandemic (H1N1) 2009 and seasonal) in Australia, 1 January 2010 to 14 May 2010, by week and type**



Source: NNDSS and NetEpi (NSW).

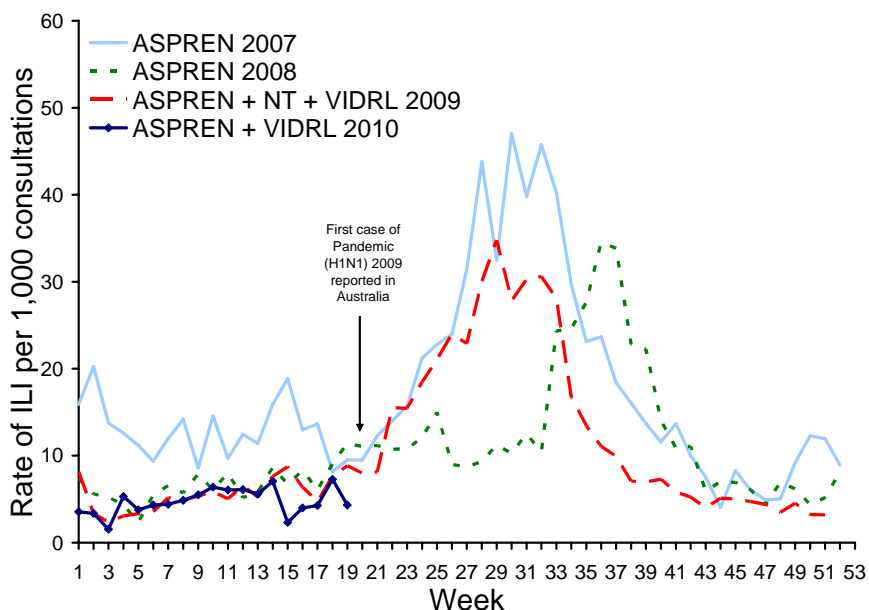
## Influenza-Like Illness

### Sentinel General Practice Surveillance

Combined data available from the Australian Sentinel Practices Research Network (ASPREN) and VIDRL show that in the week ending 9 May 2010, national ILI consultation rates decreased, and were below levels seen in previous years.

In the last week, the presentation rate to sentinel GPs in Australia was approximately four cases per 1,000 consultations (Figure 3).

**Figure 3. Weekly rate of ILI reported from GP ILI surveillance systems from 1 January 2007 to 9 May 2010\***



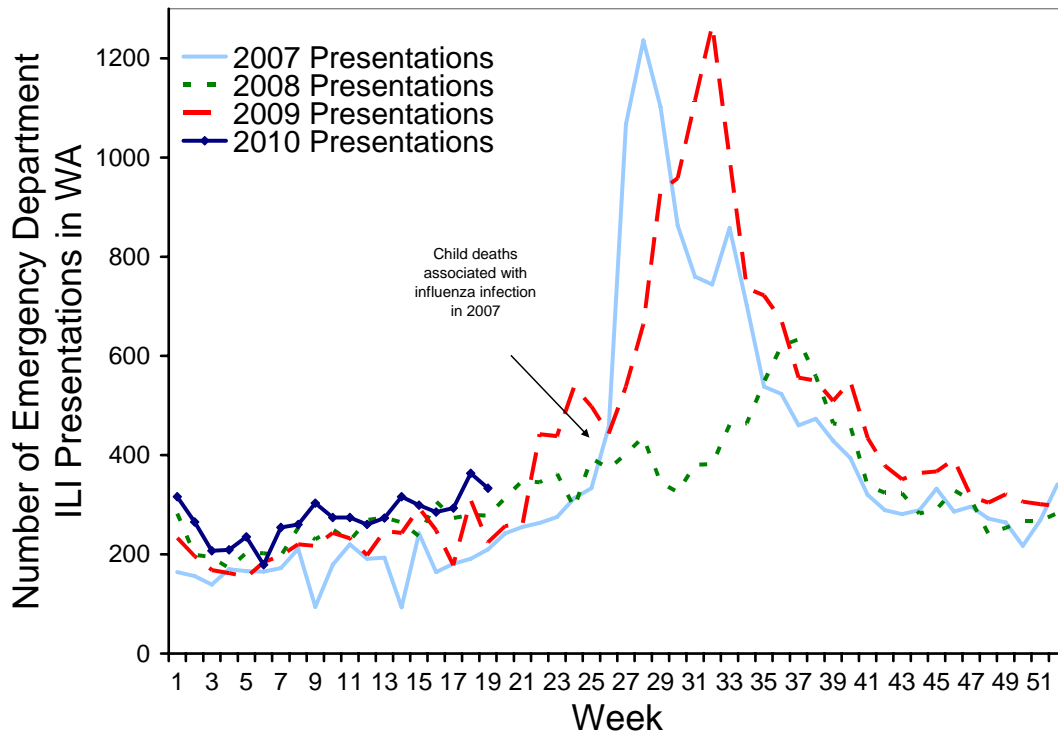
\* Delays in the reporting of data may cause data to change retrospectively. As data from the NT surveillance system is combined with ASPREN data for 2010, rates may not be directly comparable across 2007, 2008 and 2009.

SOURCE: ASPREN, and NT GP surveillance system.

## WA Emergency Departments

The number of respiratory viral presentations reported in Western Australian EDs decreased in the week ending 9 May 2010, but continue to show an upward trend (Figure 4).

**Figure 4. Number of respiratory viral presentations to Western Australia EDs from 1 January 2007 to 9 May 2010 by week**



Source: WA 'Virus Watch' Report

## NSW Emergency Departments

In April 2010, there were 120 presentations for ILI to New South Wales EDs. This is higher than the number of presentations that occurred in March (90), but lower than the number recorded in April 2009 (181 presentations).

There were three hospital admissions following presentation to EDs with ILI in April 2010, compared with five admissions in March 2010 and six admissions in April 2009.

Source: NSW Health 'Influenza Monthly Epidemiology Report'<sup>1</sup>

## Geographic spread of influenza and ILI – Jurisdictional Surveillance

In the fortnight ending 14 May 2010, influenza and ILI activity as reported by state and territory Health Departments indicated that there was ‘syndromic only’ activity in one state (NT) and ‘sporadic’ activity in all other states (Figure 5).

‘Syndromic only’ activity is defined as an increase in syndromic surveillance systems during the reporting period, but with no laboratory-confirmed cases. ‘Sporadic’ activity is defined as small numbers of laboratory-confirmed influenza cases or a single laboratory-confirmed influenza outbreak during the reporting period, but no increase in cases in syndromic surveillance systems.

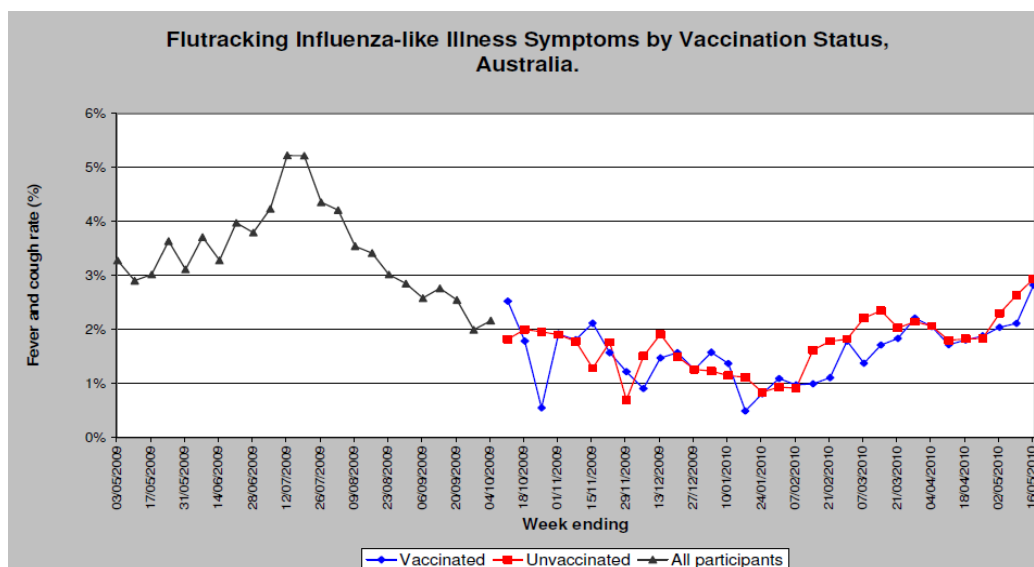
**Figure 5. Map of influenza and ILI activity, by state and territory, during fortnight ending 14 May 2010**



## Flutracking

Flutracking, a national online system for collecting data on ILI in the community, reported that in the week ending 16 May 2010, ILI levels continued to increase but levels remain low (Figure 6).

**Figure 6. Rate of ILI symptoms and absence from regular duties among Flutracking participants by week, from week ending 3 May 2009 to week ending 16 May 2010.**

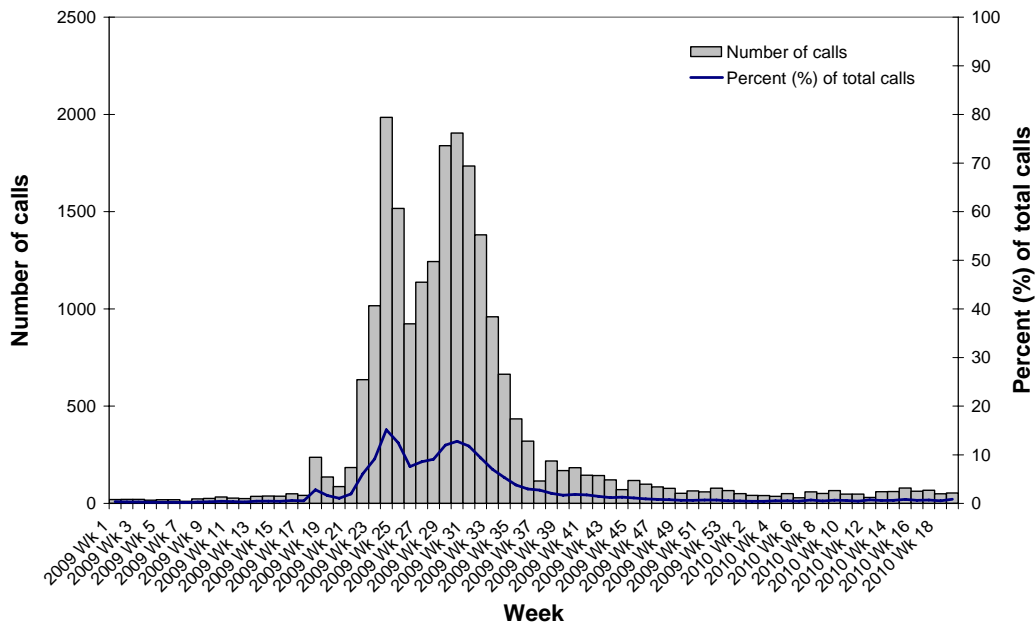


Source: Flutracking Interim Weekly Report

## National Health Call Centre Network

There were 54 ILI-related calls to the National Health Call Centre Network (NHCCN) in the week ending 14 May 2010, compared to 49 calls in the previous reporting period. The number of calls remains at baseline levels (Figure 7).

**Figure 7. Number of calls to the NHCCN related to ILI, Australia, 1 January 2009 to 14 May 2010**



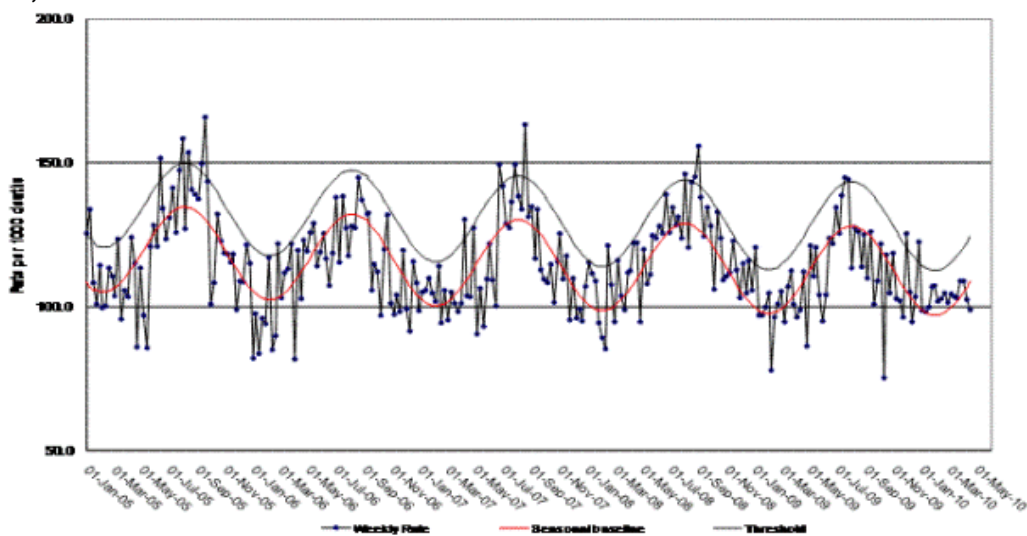
Note: national data does not include QLD and VIC

Source: NHCCN data

## Deaths associated with influenza and pneumonia

Death registration data show that as at 23 April 2010, there were 76 pneumonia or influenza deaths per 1,000 deaths in NSW, which is below the seasonal threshold of 108 per 1,000 (Figure 8).

**Figure 8. Rate of deaths classified as influenza and pneumonia from the NSW Registered Death Certificates, 2005 to 12 March 2010.**

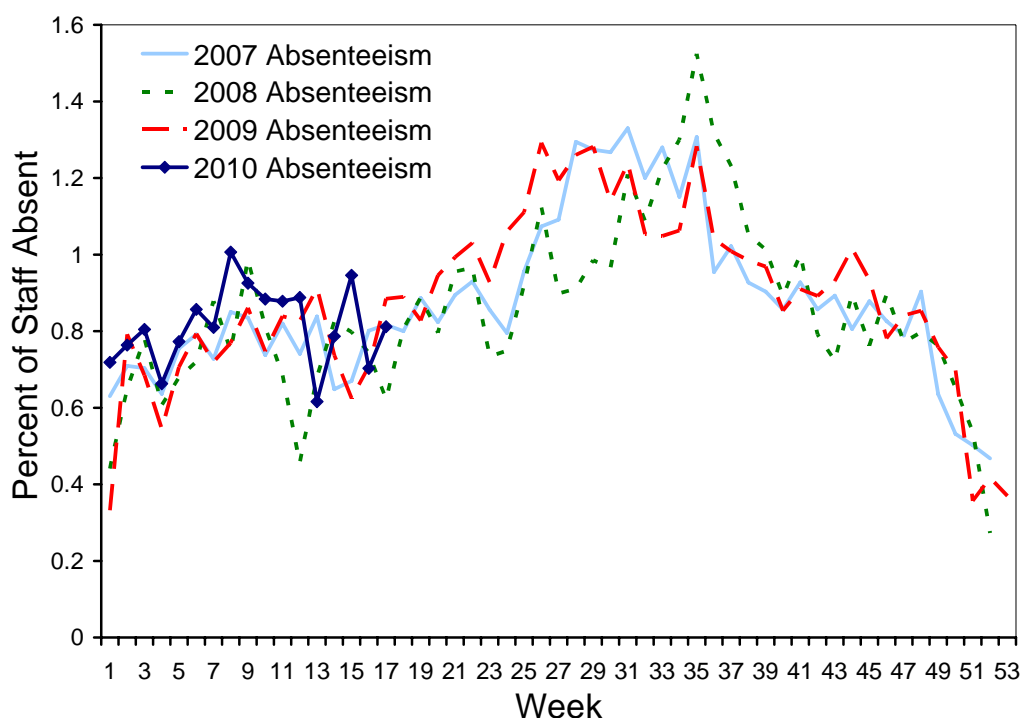


Source: NSW 'Influenza Monthly Epidemiology Report'

## Absenteeism

The most recent data indicate that in the week ending 14 May 2010, national absenteeism rates remain stable at similar levels seen at the same time in previous years (Figure 9).

**Figure 9. Rates of absenteeism (greater than 3 days absent), national employer, from 28 January 2007 to 14 May 2010, by week.**



SOURCE: Absenteeism data

## Sentinel Laboratory Surveillance - confirmed influenza notifications

Results from sentinel laboratory surveillance systems for this reporting period show that only 1.1% (7/633) of the respiratory tests conducted over this period were positive for influenza. One was positive for pandemic (H1N1) 2009, five were positive for type A/H3N2, and one was influenza A untyped (Table 1).

**Table 1. Laboratory respiratory tests that tested positive for influenza**

	ASPREN* - national	NSW laboratories	WA NIC	NT (Reported by WA NIC)	VIC NIC
<b>Number of specimens tested</b>	4	392	88	N/A	149
<b>Number tested which were Influenza A</b>	<b>0</b>	<b>2</b>	<b>3</b>	<b>0</b>	<b>2</b>
<i>Number tested which were pandemic (H1N1) 2009</i>	0	1	0	0	0
<i>Number tested which were seasonal A/H1N1</i>	0	0	0	0	0
<i>Number tested which were A/H3N2</i>	0	0	3	0	2
<i>Number tested which were Influenza A untyped</i>	0	1	0	0	0
<b>Number tested which were Influenza B</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>The most common respiratory virus detected</b>	N/A	RSV	parainfluenza-1 and 2	N/A	picornavirus

\*ASPREN tests are collected every Tuesday. Results are reported for a rolling fortnight as data changes retrospectively.

## 2. Overview of influenza severity to 14 May 2010 <sup>a</sup>

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 of the severity of the disease in Australia (Table 2).

Pandemic (H1N1) data for 2009 are currently being finalised through cleaning and validation processes. It is possible that these processes will result in some changes in the data presented here. Validated data will be progressively reported as these steps are completed.

There have been a total of 37,704 confirmed cases of pandemic (H1N1) 2009 in Australia as at 14 May 2010, including 191 pandemic influenza-associated deaths. Of these, 37,636 cases were reported in 2009 and 68 cases were reported in 2010.

**Table 2. Summary of severity indicators of pandemic (H1N1) in Australia, 2009 and 2010 up to 14 May 2010**

	2009 <sup>#</sup>				2010 <sup>a</sup>
	Confirmed pandemic (H1N1) 2009 cases	Hospitalised cases	ICU cases	Deaths	Confirmed (H1N1) 2009 cases
Total number	37,636	13% (4,992/37,636) confirmed cases)	14% (681/4,992 hospitalisations)	191	68
Crude rate per 100,000 population	172.1	22.8	3.1	0.9	0.3
Median age (years)	21	31	44 <sup>^</sup>	53 <sup>^</sup>	28.5
Females	51% (19,139/37,636)	51% (2,528/4,992)	53% (364/681)	44%	45.6% (31/68)
Vulnerable groups (Indigenous persons, pregnant women & individuals with at least 1 co-morbidity)	n/a	58% (2,892/4,992)	74% (504/681)	67%	n/a
Indigenous people~	11% (3,877/34,750)	20% (808/4,048)	19% (102/533)	13%	1.5% (1/68)
Pregnant women*	n/a	27% (287/1,056 hospitalised females aged 15-44 years)	16% (47/289 hospitalised pregnant women)	4%	n/a
Cases with at least 1 co-morbidity	n/a	46% (2,303/4,992)	67% (457/681)	62%	n/a

<sup>a</sup> Data for 2009 from NetEpi, Data for 2010 from NNDSS and NetEpi (NSW).

<sup>#</sup>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 are 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.

<sup>^</sup> Validation of data has identified anomalies affecting median ages for ICU cases and deaths in reports #28-33 2009 and report #1 2010. Correction has resulted in a change in the median ages of ICU cases and deaths from report #2, 2010.

<sup>a</sup> Note that while the analysis of severity is on-going, updates are presented as required when there are significant changes detected. With the current low levels of pandemic (H1N1) 2009 influenza activity in Australia it is anticipated that the indicators of pandemic severity will not vary significantly.



## Influenza Hospitalisations

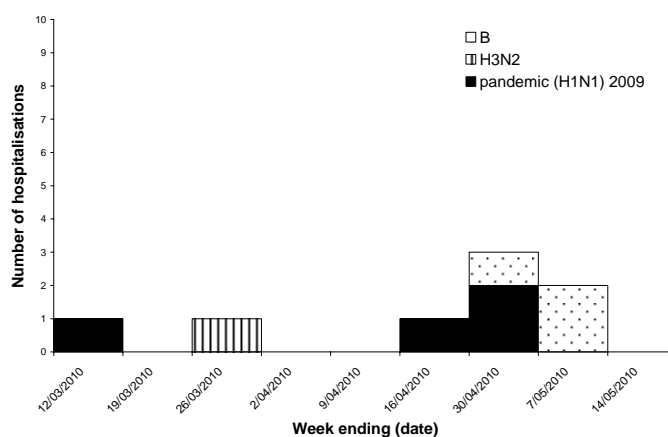
The Influenza Complications Alert Network (FluCAN) reported no influenza hospitalisations from selected hospitals for the week ending 14 May 2010. For the period of 1 March to 14 May 2010, FluCAN has reported a total of eight influenza hospitalisations (Table 3 and Figure 10). Of those, four have been associated with pandemic (H1N1) 2009, including two with ICU admission.

**Table 3. Number of influenza hospitalisations, sentinel hospitals, Australia, 1 March to 14 May 2010**

Type of influenza	Week ending 7 May 2010	Total 1 March – 7 May
Pandemic (H1N1)	0	4
Type A/H3N2	0	1
Type B	0	3
All types	0	8

Source: Influenza Complications Alert Network (FluCAN). Data are from 10 sentinel hospitals from all jurisdictions except ACT and NT.

**Figure 10. Number of influenza hospitalisations, sentinel hospitals, Australia from 1 March to 14 May 2010**

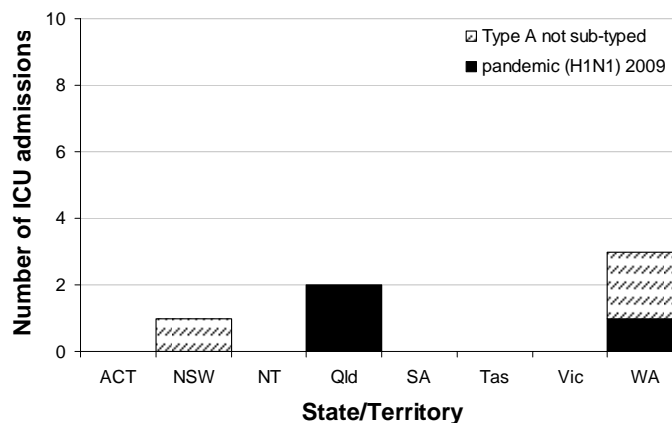


Source: FluCAN data from 10 sentinel hospitals in all jurisdictions except ACT and NT

## Intensive care

The Australian and New Zealand Intensive Care Society (ANZICS) has reported a total of six ICU admissions for influenza in 2010, and none for this reporting period. Of these, three have been associated with pandemic (H1N1) 2009 influenza and three with Type A not further sub-typed (Figure 11).

**Figure 11. Number of ICU admissions for influenza, ANZICS, Australia, 1 January to 14 May 2010**



Source: Australian and New Zealand Intensive Care Society (ANZIC) data base

### 3. Virology

#### Antigenic characteristics - WHO Collaborating Centre for Reference & Research on Influenza (WHO CC) in Melbourne

From 1 January 2010 to 17 May 2010, there were 32 Australian influenza isolates subtyped by the WHO CC (Table 4). Twenty were Pandemic (H1N1) 2009, three were A(H3N2) and nine were type B.

**Table 4. Typing of influenza isolates from the WHO Collaborating Centre, from 1 January 2010 to 9 May 2010**

Type/Subtype	ACT	NSW	NT	QLD	SA	TAS	VIC	WA	TOTAL
A(H1N1)	0	0	0	0	0	0	0	0	0
Pandemic (H1N1) 2009	1	0	3	7	0	1	6	2	20
A(H3N2)	0	0	0	0	0	0	3	0	3
B	0	0	0	0	0	0	9	0	9
<b>Total</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>7</b>	<b>0</b>	<b>1</b>	<b>18</b>	<b>2</b>	<b>32</b>

SOURCE: WHO CC

Please note: There may be up to a month delay on reporting of samples.  
Isolates tested by the WHO CC are not necessarily a random sample of all those in the community, hence proportions of pandemic (H1N1) 2009 to seasonal are not representative of the proportions circulating.

Antigenic characterisation of 11 Pandemic (H1N1) 2009 isolates has shown 10 to be the A/California/7/2009-like strain and one a low reactor version of this strain.

#### INTERNATIONAL UPDATES

The Global Influenza Surveillance Network (GISN) continues to monitor the global circulation of influenza viruses, including pandemic, seasonal and other influenza viruses infecting, or with the potential to infect, humans. Since the beginning of the pandemic on 19 April 2009 to 8 May 2010, 155 countries shared a total of 25,484 specimens (19,554 clinical samples and 5,930 virus isolates) with WHO Collaborating Centres for further characterisation.<sup>1</sup>

Pandemic (H1N1) 2009 influenza virus accounted for 84.6% of all influenza A viruses subtyped globally in the last reporting period. Seasonal Influenza B viruses are now predominant in the Russian Federation, China, Hong Kong, the Republic of Korea and Iran.

In China, influenza B accounted for 90.8% of all influenza viruses detected in the week to 9 May 2010. From 1 September 2009 to 9 May 2010, 3626 influenza B viruses have been antigenically characterised. Of those, 3289 (90.7%) were B/Victoria viruses, including 48.8% (1604) related to B/Malaysia/2506/2004-like and 51.2% (1685) related to B/Brisbane/60/2008 (included in 2010 Southern Hemisphere seasonal influenza vaccine). The remaining 337 (9.1%) were B/Yamagata viruses related to B/Florida/4/2006-like.<sup>2</sup>

## ANTIVIRAL RESISTANCE

### Pandemic (H1N1) 2009

The WHO has reported that 289 oseltamivir resistant pandemic (H1N1) 2009 viruses have been detected and characterised worldwide. All but one of these isolates showed the same H275Y mutation but were sensitive to zanamivir.<sup>1</sup> One case of pandemic (H1N1) 2009 in an immunocompromised child has shown reduced susceptibility to zanamivir and oseltamivir due to an amino acid mutation in the neuraminidase. No onward transmission was detected.<sup>3</sup>

The WHO Collaborating Centre in Melbourne has reported that from 1 January 2010 to 17 May 2010, no isolates have shown resistance to oseltamivir by enzyme inhibition assay (EIA) and two clinical specimens collected in Australia have shown the H275Y mutation known to confer resistance to oseltamivir (Table 5).

**Table 5. Neuraminidase resistance testing of Australian pandemic (H1N1) 2009 influenza viruses**

	2009		2010	
	Viral isolates (EIA)	Clinical specimens	Viral isolates (EIA)	Clinical specimens
No. tested	587	276	10	13
EIA Resistant	4	N/A	0	N/A
H275Y mutation	N/A	9	N/A	2

## 4. International Influenza Surveillance

### WHO Summary as at 9 May 2010

- There have been over 18,036 deaths associated with pandemic (H1N1) 2009 worldwide.
- Northern Hemisphere
  - The most active areas of pandemic influenza virus transmission are in parts of the Caribbean, Central America, West Africa and South and Southeast Asia.
  - Overall pandemic influenza activity is low.
  - Seasonal influenza type B viruses:
    - Continue to circulate at low levels, and
    - are the predominant influenza virus in China, Russian Federation, Hong Kong, the Republic of Korea and Iran.
- Southern Hemisphere
  - Pandemic and seasonal influenza activity is sporadic.
  - Chile continues to report localized areas of increased ILI activity associated with pandemic influenza and other respiratory viruses.
  - In Brazil, media have reported that there has been a total of 50 deaths in 2010 caused by the pandemic (H1N1) 2009 influenza virus.<sup>4</sup>

Recent influenza activity in selected areas of the Northern and Southern Hemispheres is shown in Table 7.

**Table 7. International influenza surveillance by country/region for the most recent reporting week**

Country/region	End date of most recent reporting week in 2010	Overall influenza activity level	Proportion of GP visits that were for ILI	Respiratory tests positive for influenza	Influenza which was influenza A	Influenza A which was pandemic (H1N1) 2009	Influenza A which was untyped	Influenza which was influenza B
<b>Northern Hemisphere</b>								
USA <sup>5</sup>	8 May	Low	1.1%	1.5% (26/1,722)	100% (26)	65.4% (17)	30.8% (8)	0% (0)
Canada <sup>6</sup>	8 May	Low	1.0%	0.14% (2/1,419)	2 <sup>^</sup>	1 <sup>^</sup>	1 <sup>^</sup>	0 <sup>^</sup>
Europe <sup>7</sup>	9 May	Low	Not reported	1.1% (1/89)	0 <sup>^</sup>	0 <sup>^</sup>	0 <sup>^</sup>	1 <sup>^</sup>
UK <sup>8</sup>	9 May	Low	≤0.03	0% (0/40)	N/A	N/A	N/A	N/A
China <sup>2</sup>	9 May	Low	3.7 – 4.2%	9.0% (238/2649)	9.2% (22)	45.5% (10)	0.0% (0)	90.8% (216)
<b>Southern Hemisphere*</b>								
NZ <sup>9</sup>	9 May	Low	0.03%	3.9% (2/51)	2 <sup>^</sup>	2 <sup>^</sup>	0 <sup>^</sup>	0 <sup>^</sup>
Australia	14 May	Low	0.4%	1.1%** (7/633)	100%** (7/7)	1 <sup>^</sup> **	1 <sup>^</sup> **	0%** (0/7)

<sup>^</sup>Numbers only. Percentages not calculated due to small numbers.

\* Chile and Argentina have not been included in this table this reporting period, because the online influenza surveillance reports for these countries have not been updated since January and February, respectively.

\*\*Source: Sentinel Laboratory Surveillance (see Table 1)

## 5. 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](mailto:flu@health.gov.au).

On 17 June 2009 Australia commenced the transition to a new response phase called PROTECT, in which laboratory testing is directed towards people with moderate or severe illness; those more vulnerable to severe illness; and those in institutional settings. This means that the number of confirmed cases does not reflect how many people in the community have acquired pandemic (H1N1) 2009 infection.

### **NetEpi**

In 2009, NetEpi, a web-based outbreak case reporting system for pandemic (H1N1) 2009, was used as the primary source of enhanced data on confirmed cases, hospitalisations and ICU admissions in all jurisdictions. In 2010, only data for NSW are sourced from NetEpi.

Analyses of Australian cases are based on the diagnosis date, which is the earliest of the onset date, specimen date or notification date.

### **National Notifiable Diseases Surveillance System (NNDSS)**

Laboratory confirmed influenza (all types) is notifiable in all jurisdictions in Australia. Confirmed cases of influenza are notified through NNDSS by all jurisdictions except NSW. NSW data are sourced from NetEpi.

### **Data Analysis**

Analysis of confirmed influenza cases is conducted on combined NetEpi and NNDSS data. Analysis of morbidity (hospitalisations and ICU admissions) and mortality data in 2009 has been conducted on combined NetEpi and QLD hospitalisation data.

### **Laboratory Surveillance data**

Laboratory testing data are extracted from the 'NSW Influenza Report,' and the 'The 2009 Victorian Influenza Vaccine Effectiveness Audit Report' (VIDRL) 'South Australian Seasonal Influenza Report'. These reports are provided weekly.

### **WHO Collaborating Centre for Reference & Research on Influenza (WHO CC)**

Data are provided weekly to the Surveillance Branch from the WHO CC.

### **Sentinel General Practice Surveillance**

The Australian Sentinel Practices Research Network (ASPREN) has Sentinel GPs who report 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.

Further information on Sentinel GPs' Influenza Surveillance and ASPREN activities are available at [www.dmac.adelaide.edu.au/aspren](http://www.dmac.adelaide.edu.au/aspren).

### **Sentinel 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 eight Perth EDs. 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. Data is available for all jurisdictions other than QLD and VIC.

### **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](http://www.flutracking.net/index.html).

### **FluCAN**

The Influenza Complications Network (FluCAN) collects detailed clinical information on all hospitalised cases of influenza and pneumonia from a sample of 13 sentinel hospitals across Australia. The data for this reporting period are sourced only from ten hospitals and do not include ACT and NT.

### **Australian and New Zealand Intensive Care Society data (ANZICS data)**

The Australian and New Zealand Intensive Care Society provides data from a 'near real time' registry of patients admitted to Australian ICUs. This documents the key factors influencing mortality, as well as the need for hospitalisation and mechanical ventilation. Information collected includes person characteristics and information on relevant co-morbidities, nature of the clinical syndrome associated with pandemic (H1N1) 2009, major therapeutic interventions from which organ failure outcomes can be imputed, vaccination status and vital status at time of ICU discharge and hospital discharge.

## 6. References

- 1 WHO Pandemic (H1N1) 2009 - Update 100 & Virological Surveillance Weekly Update. Available from <http://www.who.int/csr/don/en/> Accessed 19 May 2010.
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