



# INFLUENZA WEEKLY UPDATE

2012/39: 24 – 30 September 2012

The national influenza surveillance system in New Zealand is an essential public health component for assessing and implementing strategies to control influenza. This report summarises the data collected on influenza-like illness (ILI) from sentinel general practice (GP) surveillance and non-sentinel surveillance for week 39 (24 – 30 September 2012).

## Summary

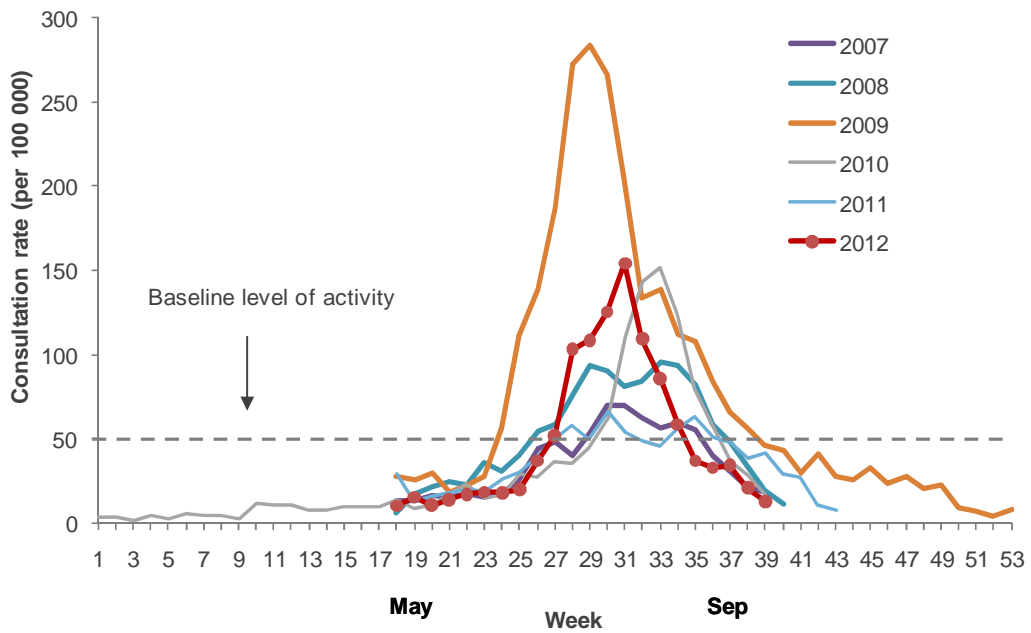
- ILI through sentinel surveillance was reported from 19 out of 20 District Health Boards (DHB) with a national consultation rate of 12.7 per 100 000 (47 ILI consultations).
- A total of 293 swabs were received from sentinel (9) and non-sentinel (284) surveillance.
- 28 viruses were identified: B (15) including two B/Wisconsin/1/2010-like viruses (belonging to the B/Yamagata lineage), A(H3N2) (8) including one A/Perth/16/2009 (H3N2)-like, A (Not subtyped) (4), and A(H1N1)pdm09 (1) virus.

In week 39, ILI consultation rate has decreased below the baseline. The proportion of positive influenza samples has also decreased. Influenza A(H3N2) viruses remain the predominant virus in many regions. These viruses do not appear to demonstrate a major antigenic drift.

## INFLUENZA-LIKE ILLNESS SURVEILLANCE

In the past week, a total of 47 consultations for ILI were reported from 79 general practices in 19 out of 20 DHBs. This gives a weekly consultation rate 12.7 of per 100 000 patient population, a decrease from 20.8 per 100 000 reported in week 38. Figure 1 shows the weekly national consultation rates for 2007–2012 to date.

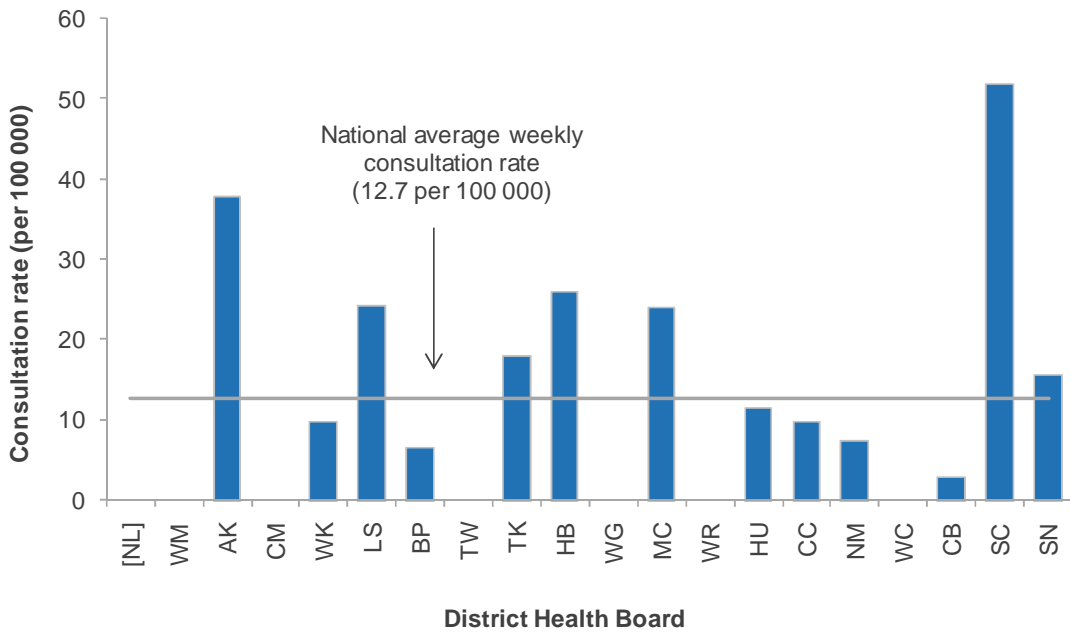
**Figure 1. Weekly consultation rates for ILI in New Zealand, 2007–2012**



\* A weekly rate <50 ILI consultations per 100 000 patient population is considered baseline activity. A rate of 50–249 is considered indicative of normal seasonal influenza activity, and a rate of 250–399 indicative of higher than expected influenza activity. A rate >400 ILI consultations per 100 000 patient population indicates an epidemic level of influenza activity.

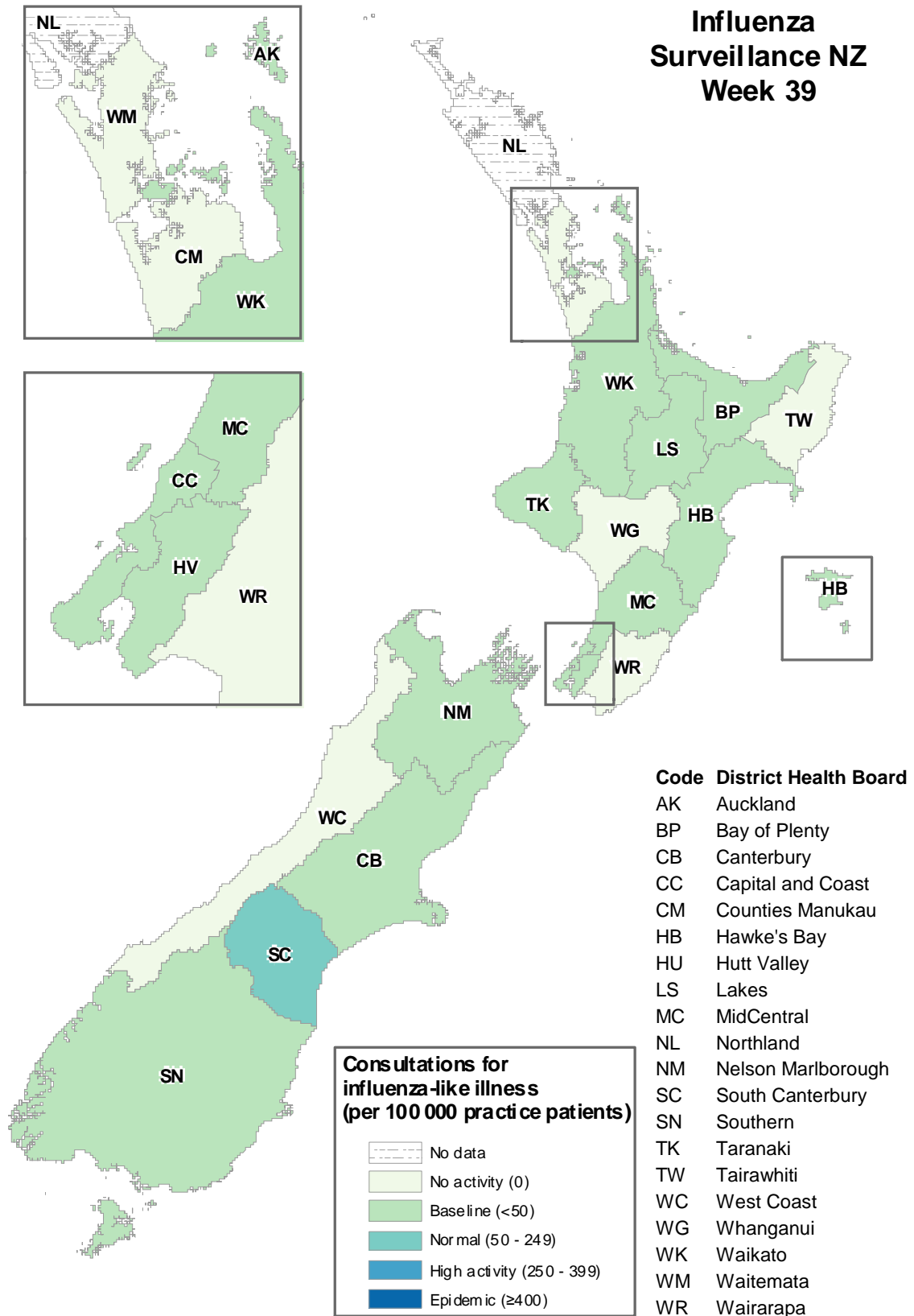
Figure 2 compares the consultation rates for ILI for each DHB over the past week. South Canterbury DHB had the highest consultation rate (51.9 per 100 000, 4 cases) followed by Auckland (37.9 per 100 000, 7 cases) and Hawke’s Bay (26.0 per 100 000, 5 cases).

**Figure 2. Weekly consultation rates for ILI by DHB week ending 30 September 2012**



[ ] Not participating in sentinel influenza surveillance.

Figure 3. Consultation rates for ILI mapped by DHB for week 39, 2012



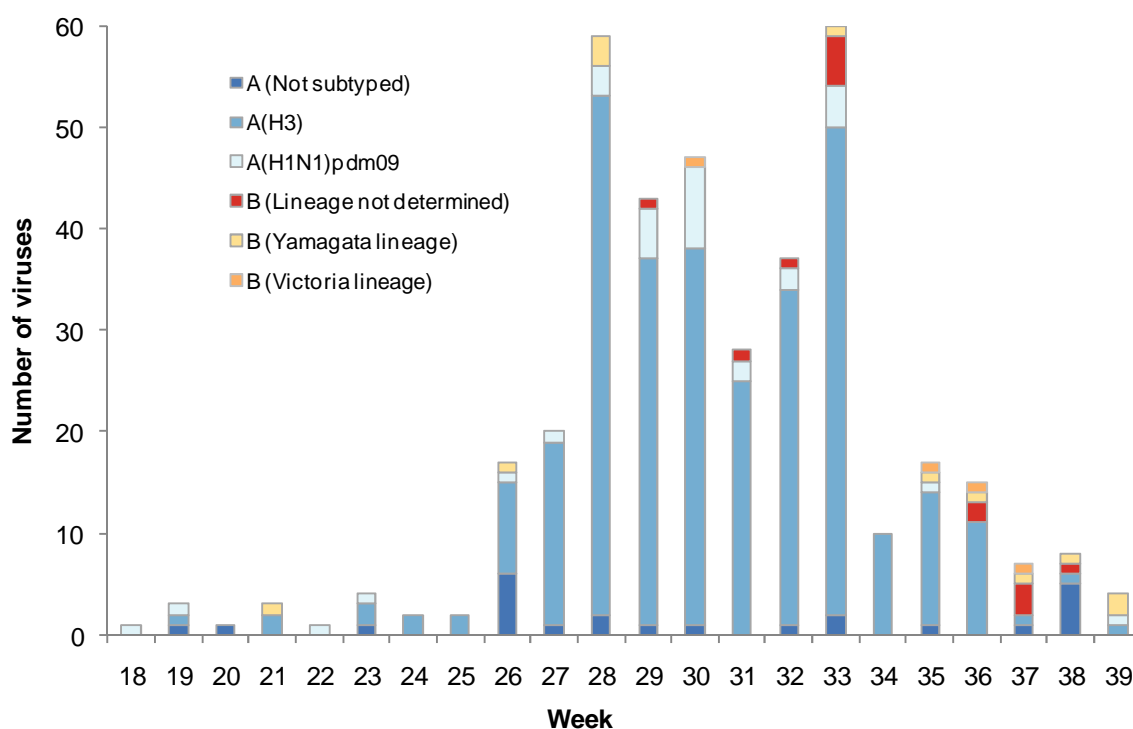
## VIROLOGICAL SURVEILLANCE

A total of nine<sup>1</sup>, swabs were received by virology laboratories from sentinel surveillance. Of these, four<sup>2</sup>, viruses were identified (Figure 4): B/Wisconsin/1/2010-like (2), A(H1N1)pdm09 (1), and A/Perth/16/2009 (H3N2)-like (1). The distribution by DHB is shown in Table 1.

**Table 1. Influenza viruses from sentinel surveillance for week 39 by DHB**

Antigenic strain	DHB				Total
	BP	TK	MC	CB	
A(H1N1)pdm09	0	0	0	1	1
A/Perth/16/2009 (H3N2)-like	1	0	0	0	1
B/Wisconsin/1/2010-like	0	1	1	0	2
<b>Total</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>4</b>

**Figure 4. Total influenza viruses from sentinel surveillance by type and week reported, week 18–39**



In addition, 284<sup>1</sup> swabs were received by virology laboratories from non-sentinel surveillance. Of these, 24<sup>2</sup> viruses were identified (Figure 5): B (Lineage not determined) (13), A(H3N2) (7), and A (Not subtyped) (4). The distribution by DHB is shown in Table 2.

<sup>1</sup> Data is from 5/6 virology laboratories.

<sup>2</sup> Data is from 5/6 virology laboratories.

**Table 2. Influenza viruses from non-sentinel surveillance for week 39 by DHB**

Antigenic strain	DHB			Total
	CM	WK	CC	
A (Not subtyped)	0	0	4	<b>4</b>
A(H3N2)	7	0	0	<b>7</b>
B (Lineage not determined)	3	3	7	<b>13</b>
<b>Total</b>	<b>10</b>	<b>3</b>	<b>11</b>	<b>24</b>

**Figure 5. Total influenza viruses from non-sentinel surveillance by type and week reported, week 18–39 and the total percentage positive from the swabs received**

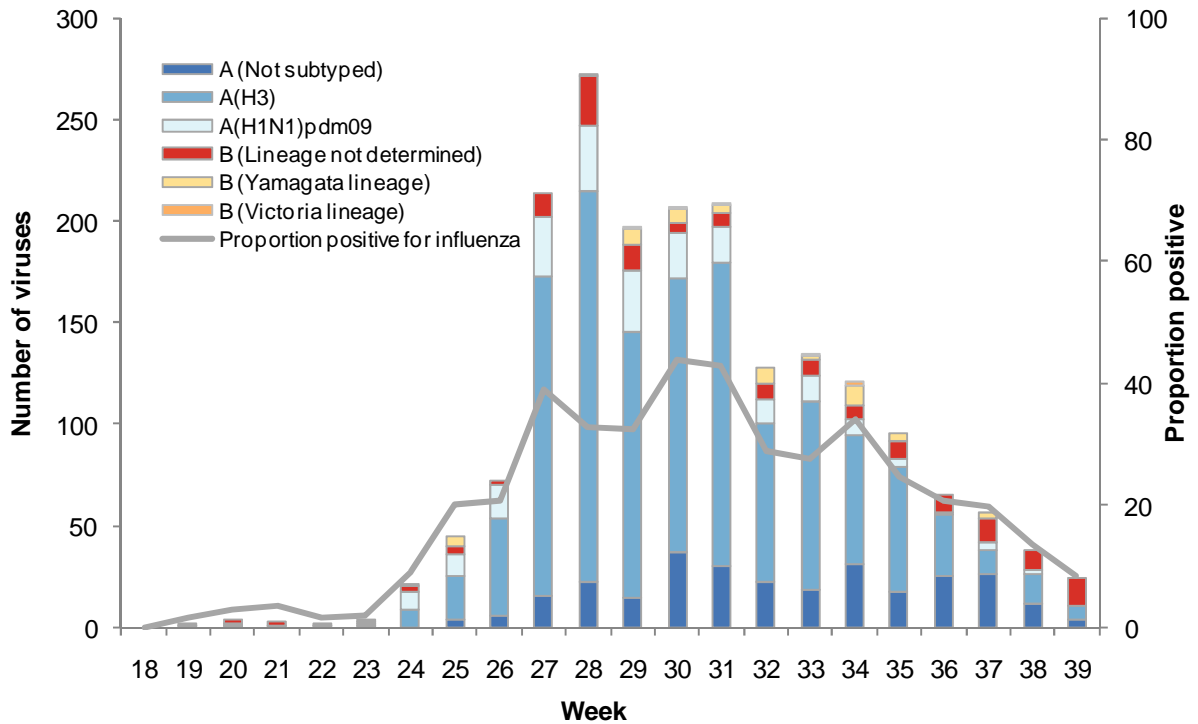
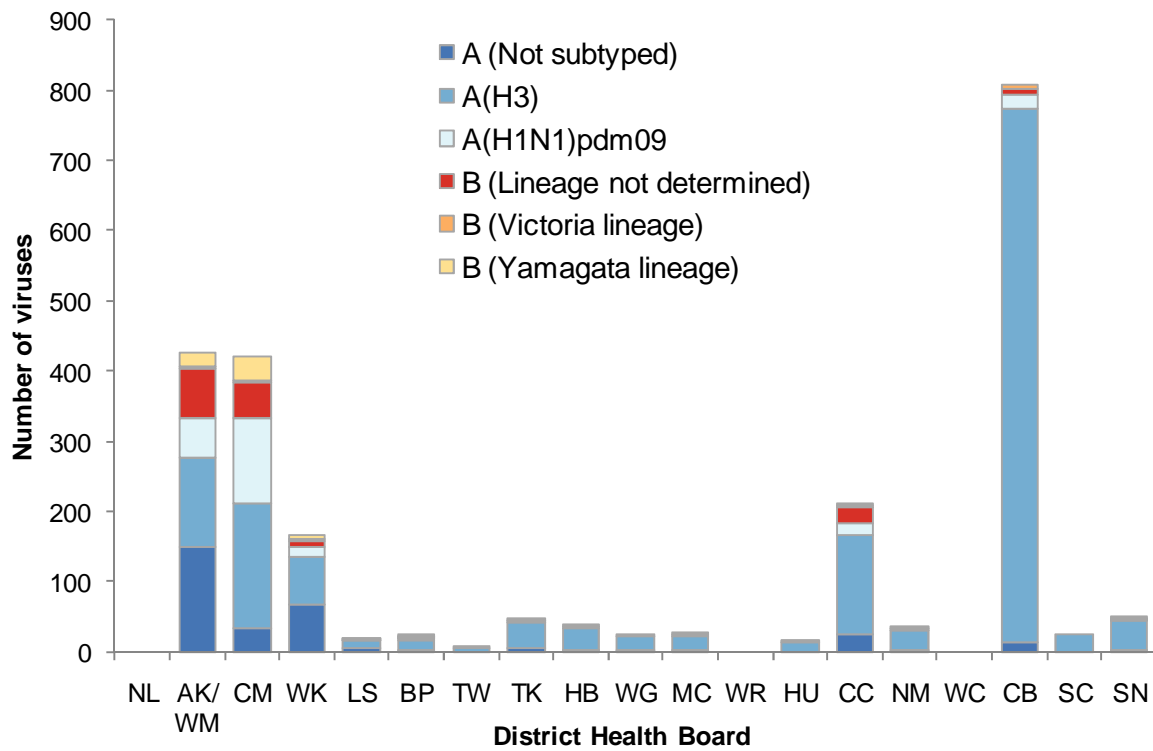


Figure 6 shows the cumulative total of influenza viruses confirmed (sentinel and non-sentinel surveillance) from week 1 to the end of week 39 (30 September 2012) in each DHB. A total of 2330 influenza viruses were identified: influenza A(H3N2) (1526) including 395 A/Perth/16/2009 (H3N2)-like viruses, B (252) including 14 of B/Brisbane/60/2008-like (belonging to the B/Victoria lineage) and 69 B/Wisconsin/1/2010-like viruses (belonging to the B/Yamagata lineage), A(H1N1)pdm09 (244) including 81 A/California/7/2009 (H1N1)-like virus, and A (Not subtyped) (308). The highest numbers were from the Canterbury DHB, followed by Auckland/Waitemata and Counties Manukau DHBs.

Note: The 2012 southern hemisphere winter influenza vaccine has the following composition: A/California/7/2009(H1N1)-like, A/Perth/16/2009(H3N2)-like and B/Brisbane/60/2008-like strains.

**Figure 6. Cumulative laboratory-confirmed viruses by DHB from week 1 to week 39, 30 September 2012**



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