

INFLUENZA WEEKLY UPDATE

2012/37: 10 – 16 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 37 (10 – 16 September 2012).

Summary

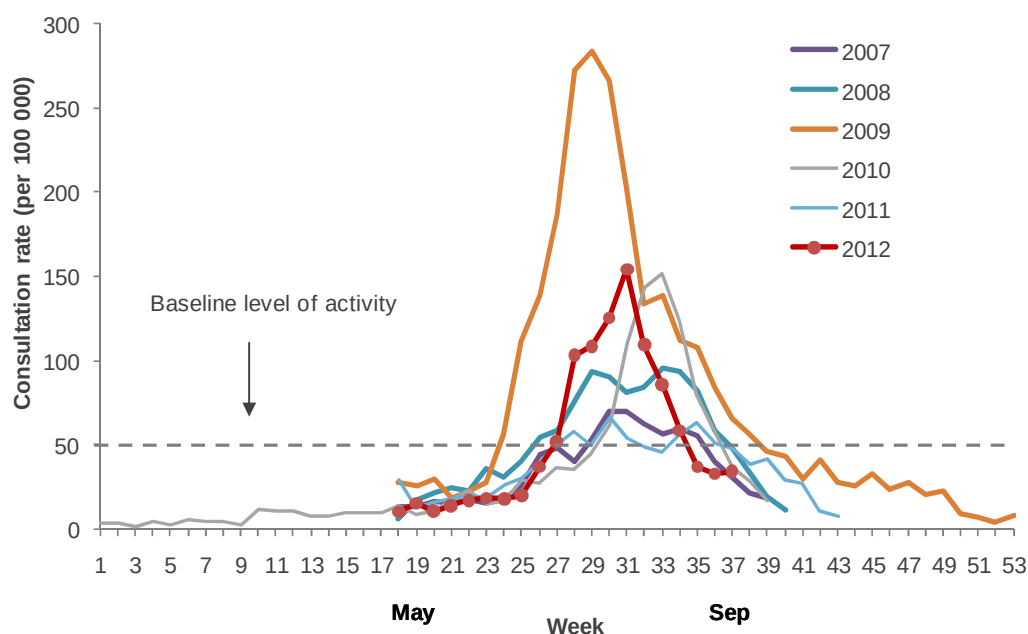
- ILI through sentinel surveillance was reported from 19 out of 20 District Health Boards (DHB) with a national consultation rate of 34.2 per 100 000 (131 ILI consultations).
- A total of 305 swabs were received from sentinel (24) and non-sentinel (281) surveillance.
- 63 viruses were identified: A (Not subtyped) (28), A(H3N2) (13)) including four A/Perth/16/2009 (H3N2)-like viruses, B (19) including one of B/Brisbane/60/2008-like (belonging to the B/Victoria lineage) and two B/Wisconsin/1/2010-like viruses (belonging to the B/Yamagata lineage), and A(H1N1)pdm09 (3).

In week 37, 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 131 consultations for ILI were reported from 81 general practices in 19 out of 20 DHBs. This gives a weekly consultation rate 34.2 of per 100 000 patient population, a slight increase from 32.6 per 100 000 reported in week 36. Figure 1 shows the weekly national consultation rates for 2007–2012 to date.

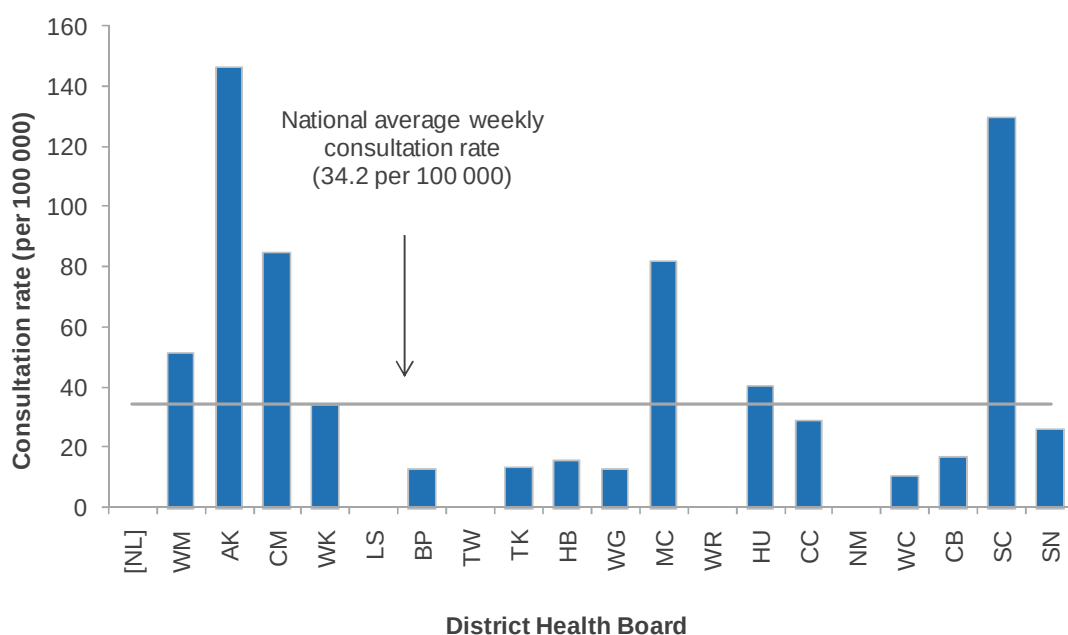
Figure 1. Weekly consultation rates for ILI in New Zealand, 2007–2012



* 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.

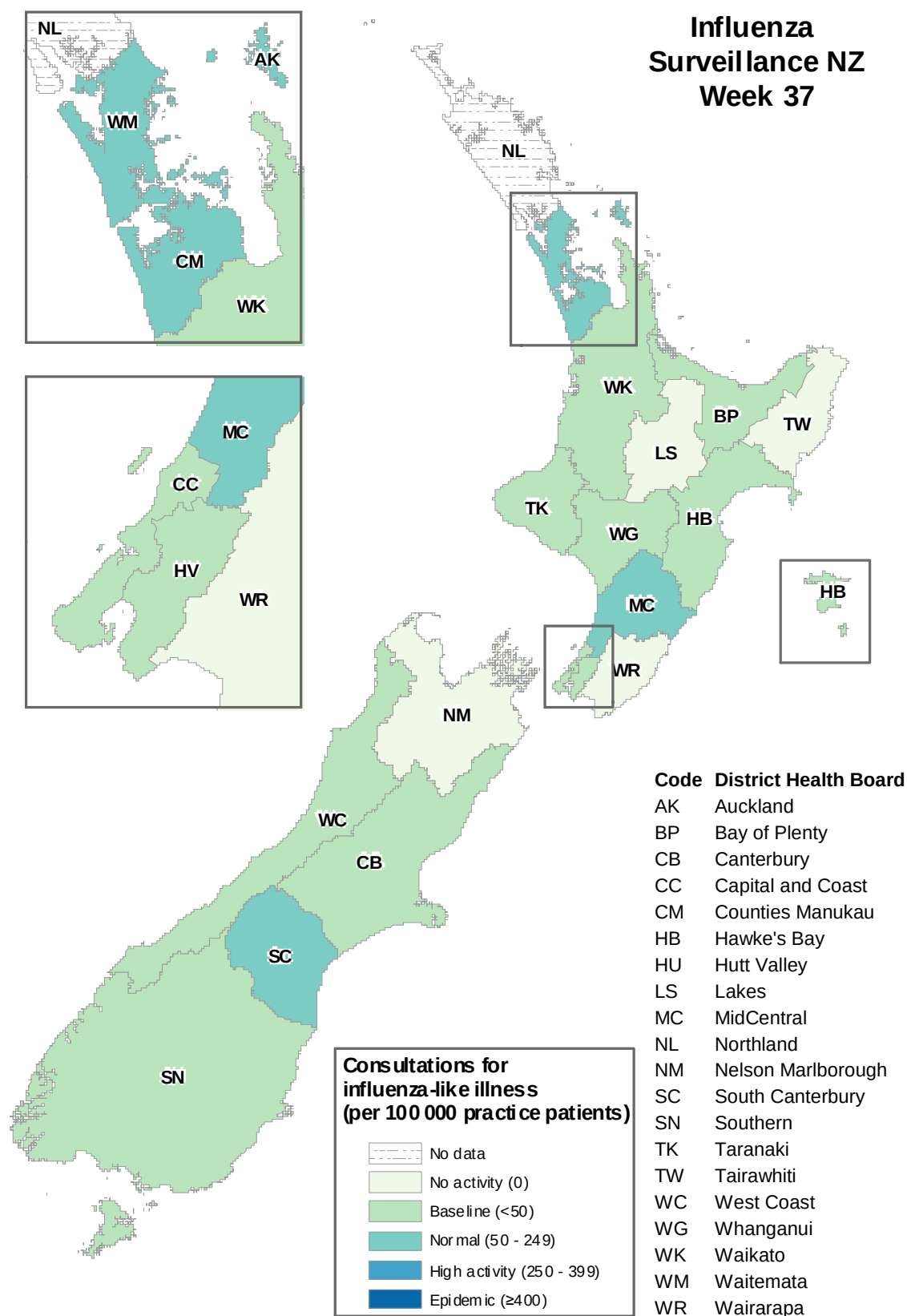
Figure 2 compares the consultation rates for ILI for each DHB over the past week. Auckland DHB had the highest consultation rate (146.4 per 100 000, 29 cases) followed by South Canterbury (129.6 per 100 000, 10 cases). The following DHBs also had rates above the national average of 34.2 per 100 000: Counties Manukau (84.8 per 100 000, 1 case), MidCentral (82.1 per 100 000, 17 cases), Waitemata (51.6 per 100 000, 5 cases), and Waikato (34.5 per 100 000, 7 cases).

Figure 2. Weekly consultation rates for ILI by DHB week ending 16 September 2012



[] Not participating in sentinel influenza surveillance.

Figure 3. Consultation rates for ILI mapped by DHB for week 37, 2012



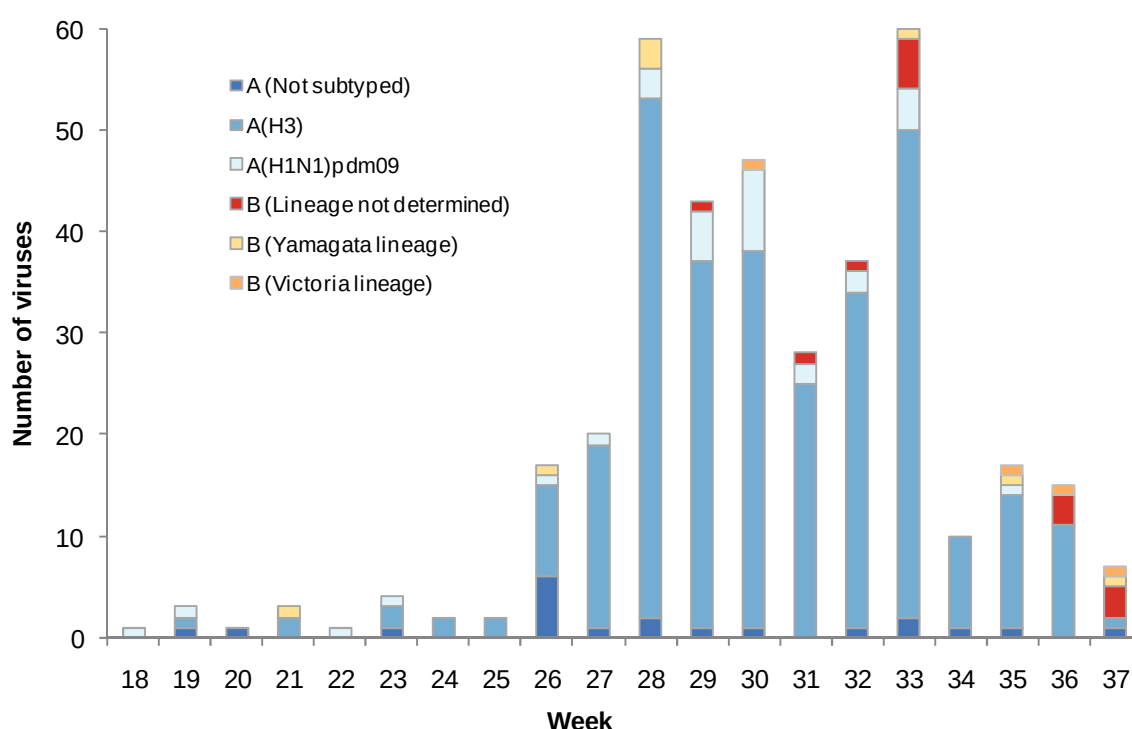
VIROLOGICAL SURVEILLANCE

A total of 24¹, swabs were received by virology laboratories from sentinel surveillance. Of these, seven viruses were identified (Figure 4): B (Lineage not determined) (3), B/Brisbane/60/2008-like (1), B/Wisconsin/1/2010-like (1), A (Not subtyped) (1) and A(H3N2) (1). The distribution by DHB is shown in Table 1.

Table 1. Influenza viruses from sentinel surveillance for week 37 by DHB

Antigenic strain	DHB				Total
	AK/WM	WK	BP	SN	
A (Not subtyped)	1	0	0	0	1
A(H3N2)	0	0	0	1	1
B (Lineage not determined)	2	1	0	0	3
B/Brisbane/60/2008-like	0	0	1	0	1
B/Wisconsin/1/2010-like	0	0	1	0	1
Total	3	1	2	1	7

Figure 4. Total influenza viruses from sentinel surveillance by type and week reported, week 18–37



In addition, 281¹ swabs were received by virology laboratories from non-sentinel surveillance. Of these, 56 viruses were identified (Figure 5): A (Not subtyped) (27), A(H3N2) (8), A/Perth/16/2009 (H3N2)-like (4), B (Lineage not determined) (13), B/Wisconsin/1/2010-like (1), and A(H1N1)pdm09 (3). The distribution by DHB is shown in Table 2.

¹ Data is from 5/6 virology laboratories.

Table 2. Influenza viruses from non-sentinel surveillance for week 37 by DHB

Antigenic strain	DHB							Total
	AK/WM	CM	WK	LS	CC	CB	SC	
A (Not subtyped)	11	3	7	1	5	0	0	27
A(H1N1)pdm09	1	2	0	0	0	0	0	3
A(H3N2)	1	5	0	0	0	0	2	8
A/Perth/16/2009 (H3N2)-like	2	0	1	0	0	1	0	4
B (Lineage not determined)	6	3	2	0	2	0	0	13
B/Wisconsin/1/2010-like	1	0	0	0	0	0	0	1
Total	22	13	10	1	7	1	2	56

Figure 5. Total influenza viruses from non-sentinel surveillance by type and week reported, week 18–37 and the total percentage positive from the swabs received

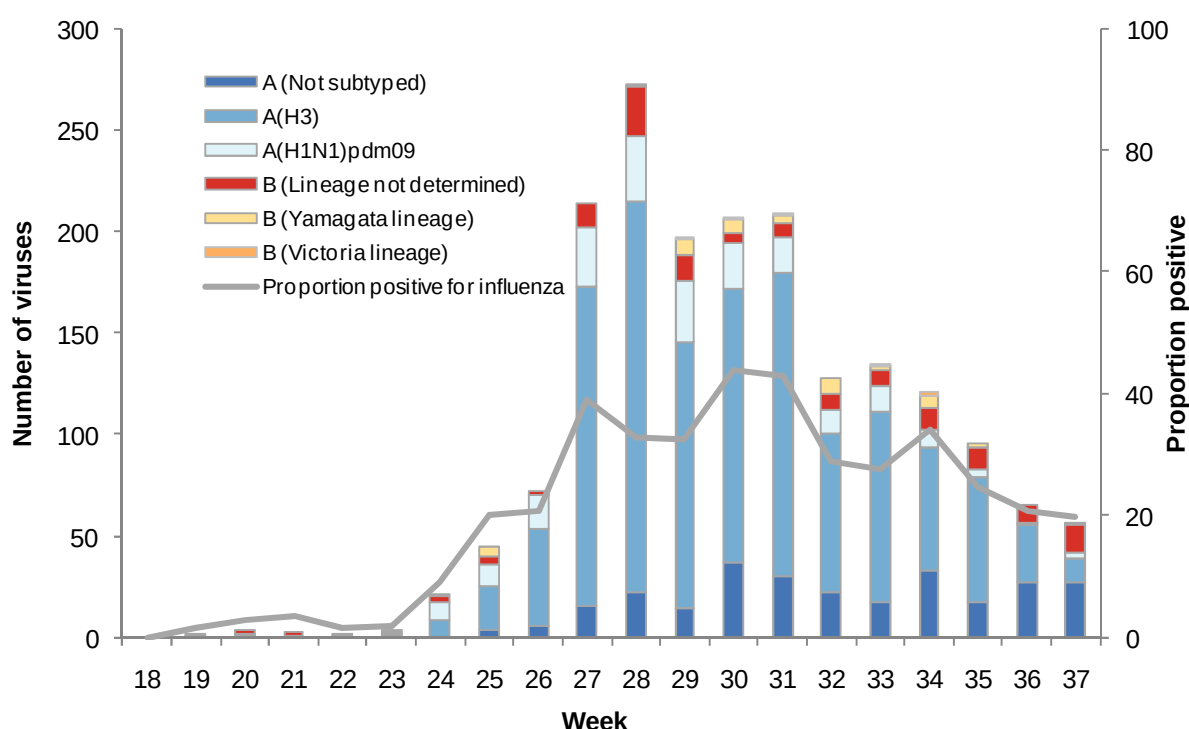
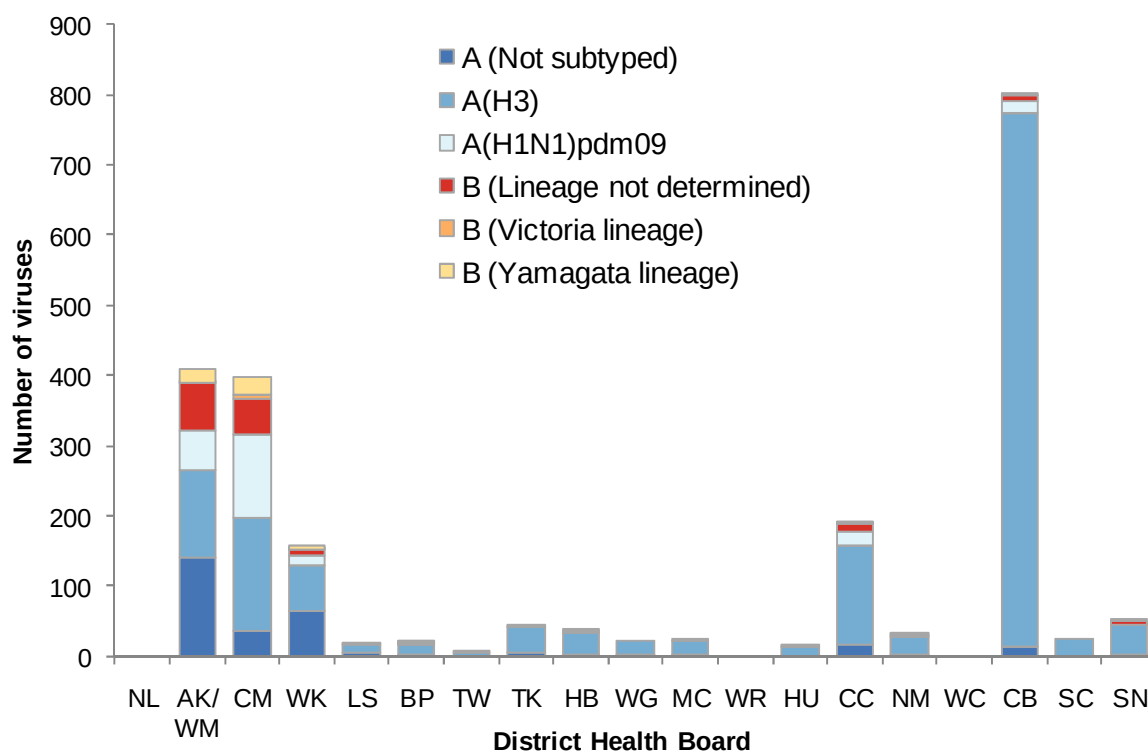


Figure 6 shows the cumulative total of influenza viruses confirmed (sentinel and non-sentinel surveillance) from week 1 to the end of week 37 (16 September 2012) in each DHB. A total of 2256 influenza viruses were identified: influenza A(H3N2) (1498) including 353 A/Perth/16/2009 (H3N2)-like viruses, B (225) including 14 of B/Brisbane/60/2008-like (belonging to the B/Victoria lineage) and 58 B/Wisconsin/1/2010-like viruses (belonging to the B/Yamagata lineage), A(H1N1)pdm09 (241) including 74 A/California/7/2009 (H1N1)-like virus, and A (Not subtyped) (292). 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 37, 16 September 2012



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