



INFLUENZA WEEKLY UPDATE

2012/32: 6 – 12 August 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 32 (6 – 12 August 2012).

Summary

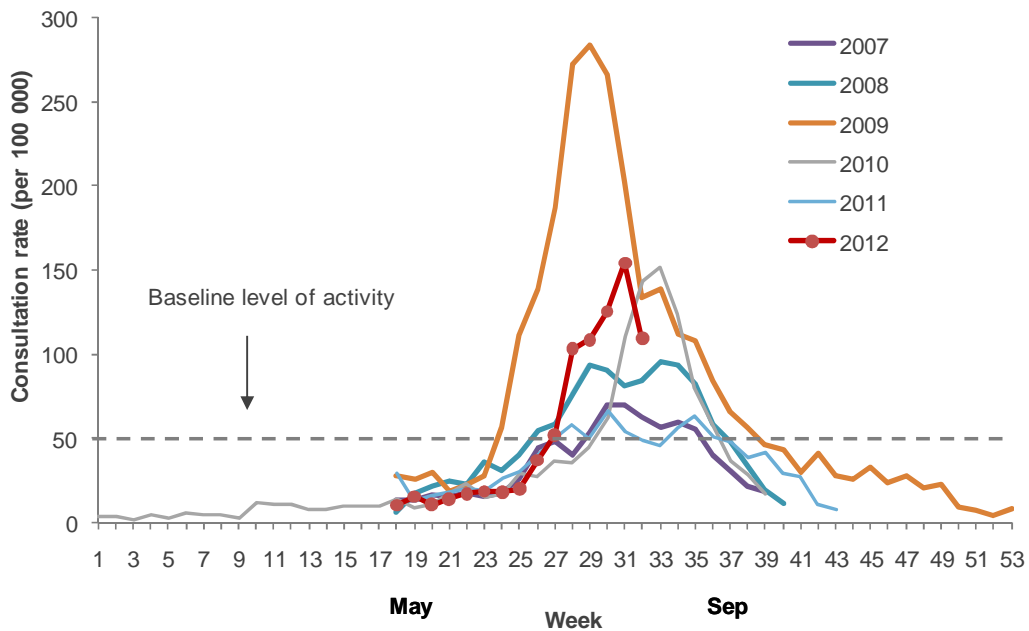
- ILI through sentinel surveillance was reported from 19 out of 20 District Health Boards (DHB) with a national consultation rate of 109.2 per 100 000 (421 ILI consultations).
- A total of 513 swabs were received from sentinel (69) and non-sentinel (444) surveillance.
- 166 viruses were identified: A(H3N2) (87), A (Not subtyped) (49), B (Lineage not determined) (17), and A(H1N1)pdm09 (13) including one A/California/7/2009 (H1N1)-like virus.

In week 32, ILI consultations and the proportion of positive influenza samples have both 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 421 consultations for ILI were reported from 83 general practices in 19 out of 20 DHBs. This gives a weekly consultation rate of 109.2 per 100 000 patient population, a decrease from 154.1 per 100 000 reported in week 31. Figure 1 shows the weekly national consultation rates for 2007–2012 to date.

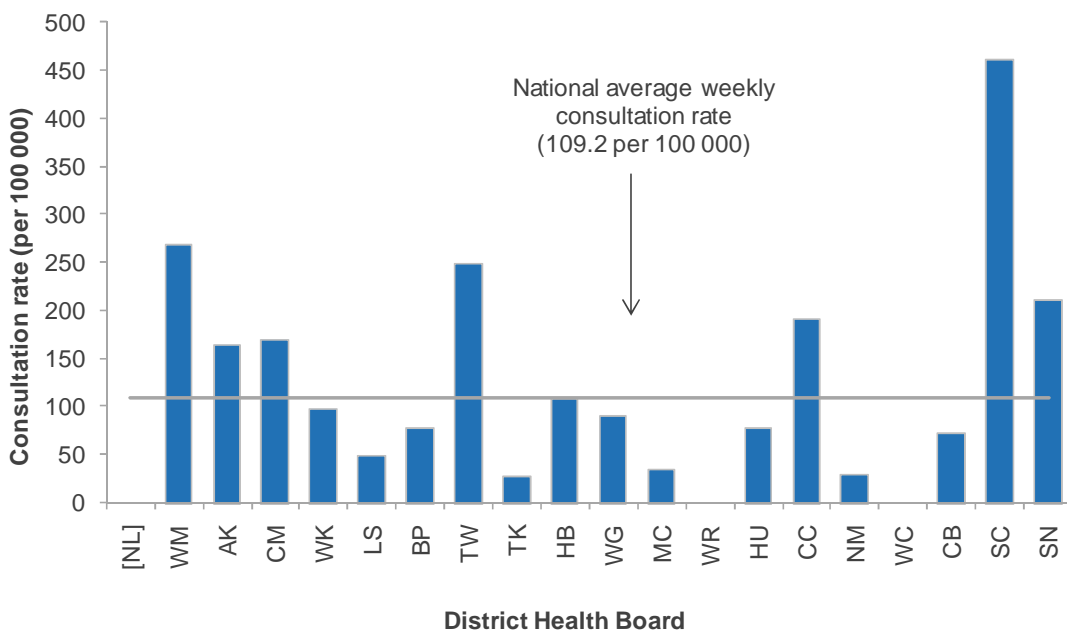
Figure 1. Weekly consultation rates for ILI in New Zealand, 2007–2012



* 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.

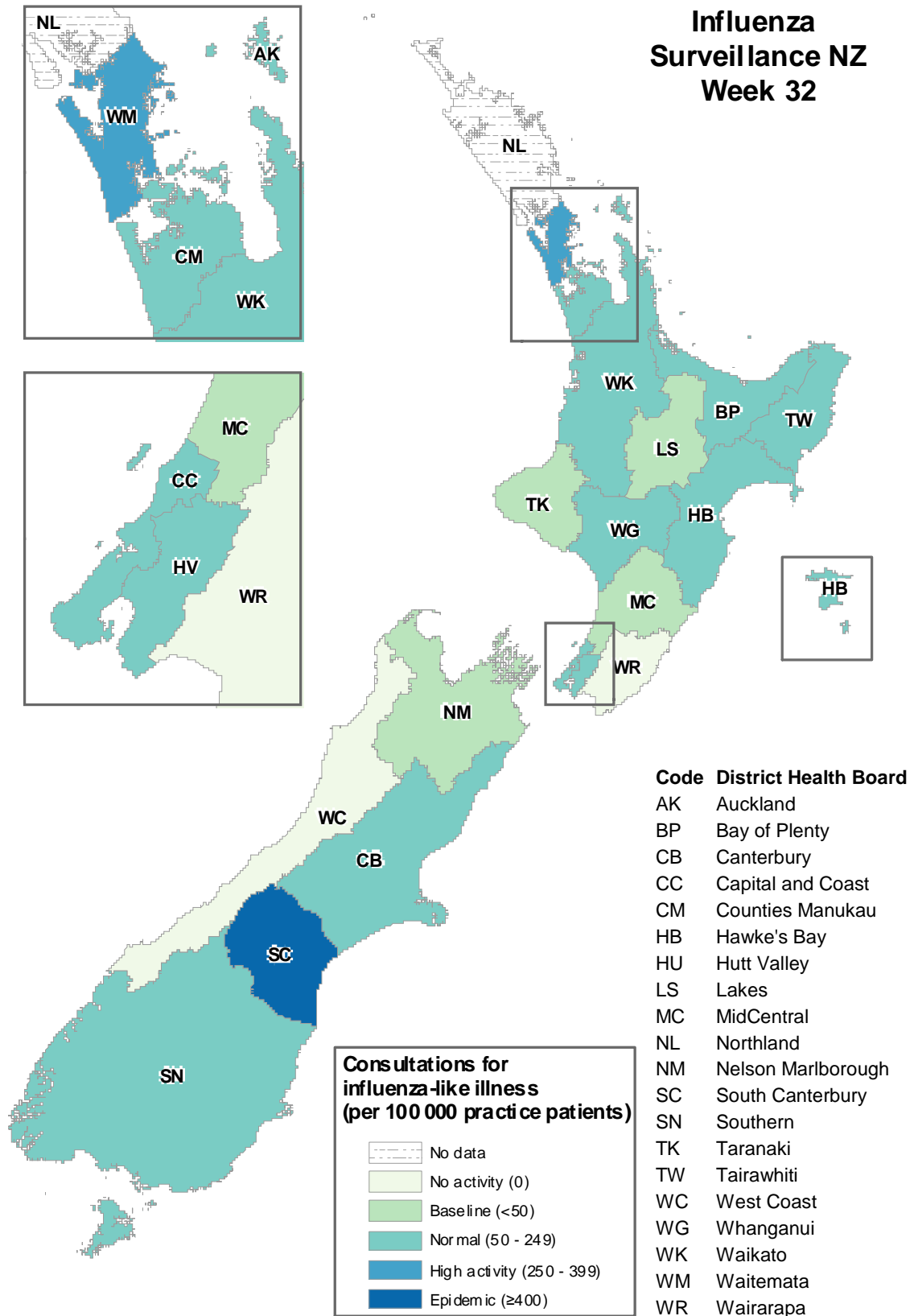
Figure 2 compares the consultation rates for ILI for each DHB over the past week. South Canterbury DHB had the highest consultation rate (460.6 per 100 000, 24 cases) followed by Waitemata (268.3 per 100 000, 26 cases). The following DHBs also had rates above the national average of 109.2 per 100 000: Tairāwhiti (248.9 per 100 000, 8 cases), Southern (211.0 per 100 000, 121 cases), Capital and Coast (190.6 per 100 000, 42 cases), Counties Manukau (169.6 per 100 000, 2 cases), Auckland (163.6 per 100 000, 36 cases), and Hawke’s Bay (109.1 per 100 000, 21 cases).

Figure 2. Weekly consultation rates for ILI by DHB week ending 12 August 2012



[] Not participating in sentinel influenza surveillance.

Figure 3. Consultation rates for ILI mapped by DHB for week 32, 2012



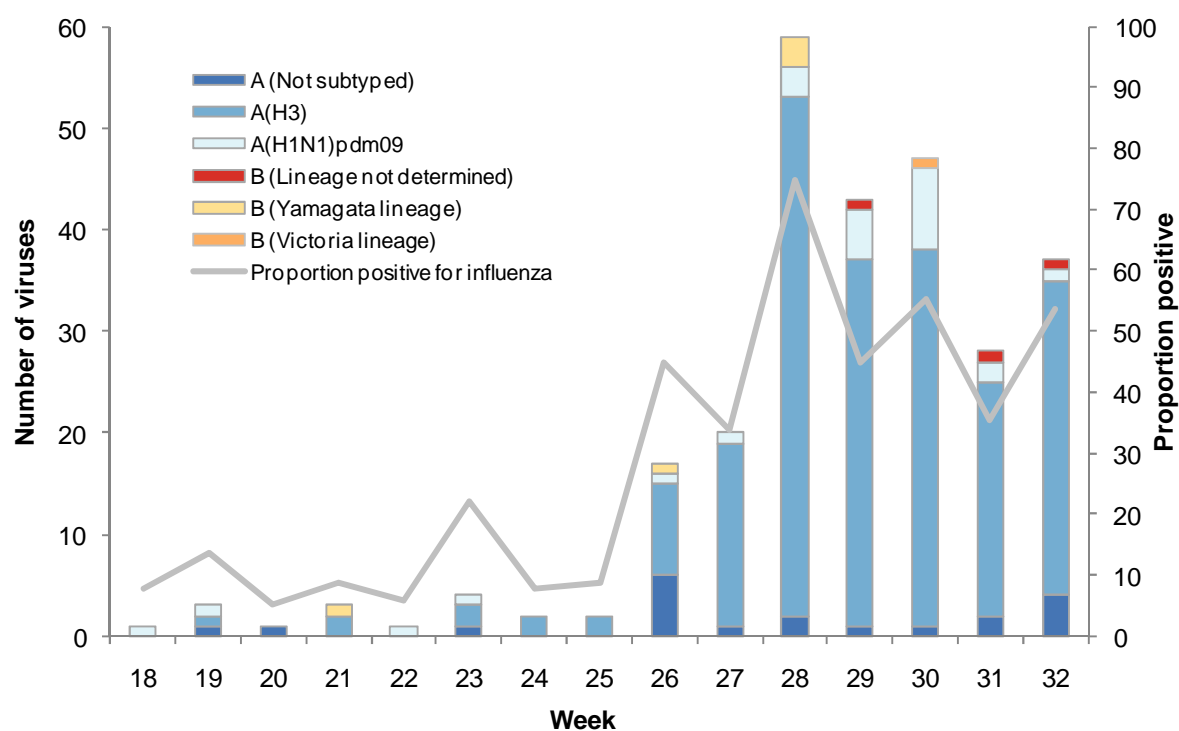
VIROLOGICAL SURVEILLANCE

A total of 69¹ swabs were received by virology laboratories from sentinel surveillance. Of these, 37 viruses were identified (Figure 4): A(H3N2) (31), A (Not subtyped) (4), A(H1N1)pdm09 (1), and B (Lineage not determined) (1). The distribution by DHB is shown in Table 1.

Table 1. Influenza viruses from sentinel surveillance for week 32 by DHB

Antigenic strain	DHB										Total
	AK/WM	WK	TK	HB	WG	HU	CC	NM	CB	SN	
A (Not subtyped)	2	1	1	0	0	0	0	0	0	0	4
A(H1N1)pdm09	0	0	0	0	0	0	1	0	0	0	1
A(H3N2)	0	0	3	4	4	2	3	4	2	9	31
B (Lineage not determined)	1	0	0	0	0	0	0	0	0	0	1
Total	3	1	4	4	4	2	4	4	2	9	37

Figure 4. Total influenza viruses from sentinel surveillance by type and week reported, week 18–32 and the total percentage positive from the swabs received



In addition, 444¹ swabs were received by virology laboratories from non-sentinel surveillance. Of these, 129 viruses were identified (Figure 5): A(H3N2) (56), A (Not subtyped) (45), B (Lineage not determined) (16), A(H1N1)pdm09 (11), and A/California/7/2009 (H1N1)-like (1). 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 32 by DHB

Antigenic strain	DHB												Total
	AK	CM	WK	LS	BP	TK	HB	MC	CC	CB	SC	SN	
A (Not subtyped)	20	3	14	1	4	0	0	0	3	0	0	0	45
A(H1N1)pdm09	1	8	0	0	0	0	0	0	1	1	0	0	11
A(H3N2)	6	8	0	0	0	2	2	1	13	15	6	3	56
A/California/7/2009 (H1N1)-like	0	0	1	0	0	0	0	0	0	0	0	0	1
B (Lineage not determined)	8	6	1	0	0	0	0	0	1	0	0	0	16
Total	35	25	16	1	4	2	2	1	18	16	6	3	129

Figure 5. Total influenza viruses from non-sentinel surveillance by type and week reported, week 18–32 and the total percentage positive from the swabs received

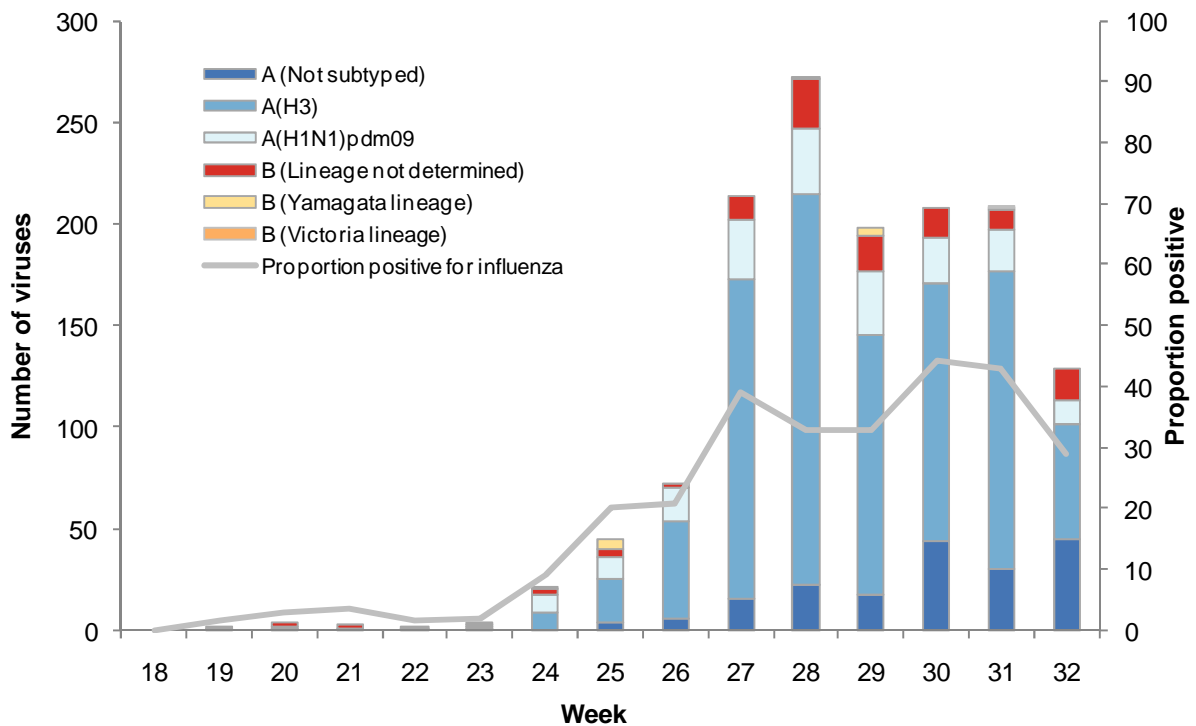
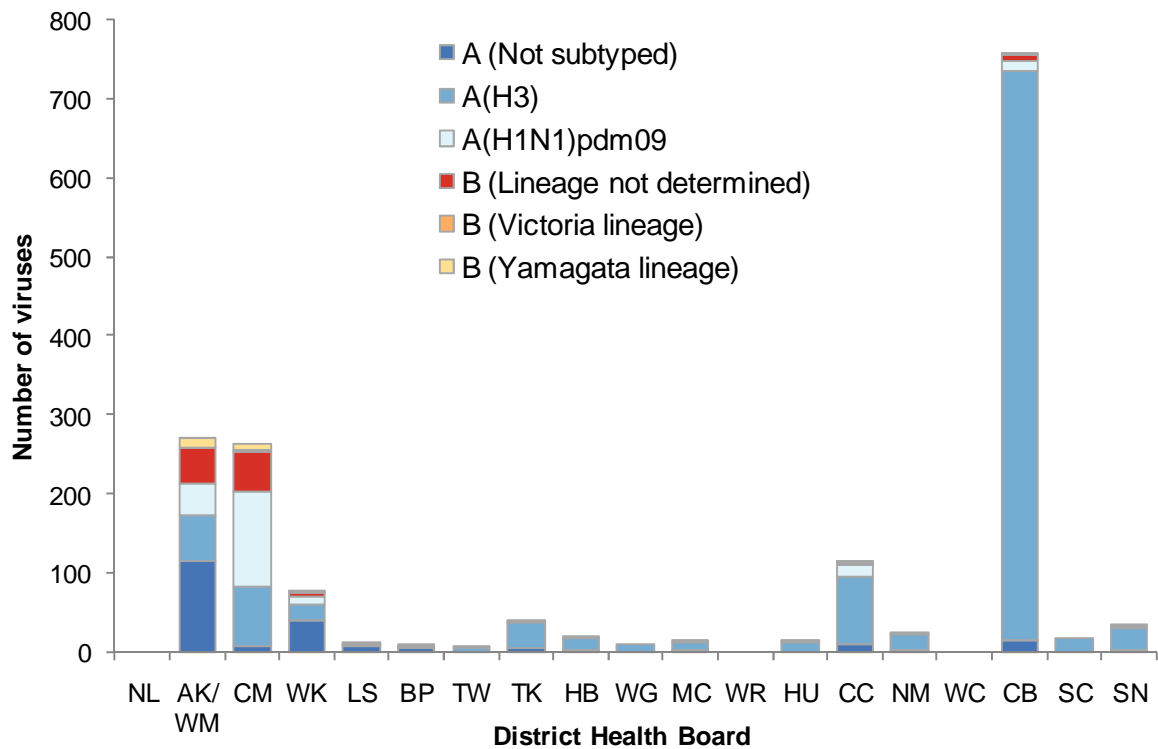


Figure 6 shows the cumulative total of influenza viruses confirmed (sentinel and non-sentinel surveillance) from week 1 to the end of week 32 (12 August 2012) in each DHB. A total of 1677 influenza viruses were identified: influenza A(H3N2) (1120) including 104 A/Perth/16/2009 (H3N2)-like viruses, B (144) including six of B/Brisbane/60/2008-like (belonging to the B/Victoria lineage) and 22 B/Wisconsin/1/2010-like viruses (belonging to the B/Yamagata lineage), A(H1N1)pdm09 (209) including 37 A/California/7/2009 (H1N1)-like virus, and A (Not subtyped) (204). 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 32, 12 August July 2012



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