



INFLUENZA WEEKLY UPDATE

2012/35: 27 August – 2 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 35 (27 August – 2 September 2012).

Summary

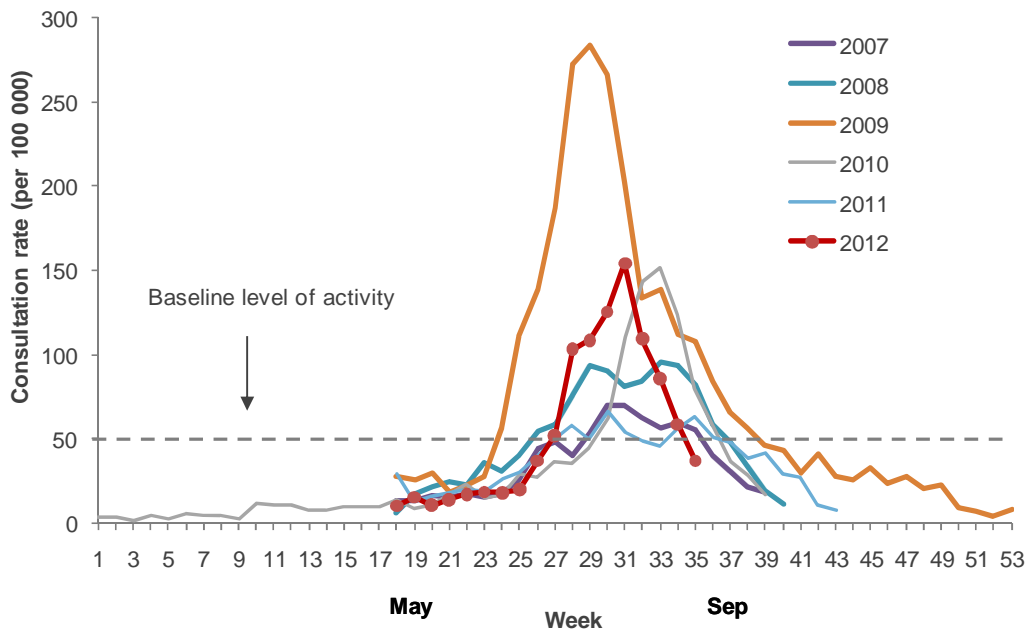
- ILI through sentinel surveillance was reported from 19 out of 20 District Health Boards (DHB) with a national consultation rate of 36.7 per 100 000 (137 ILI consultations).
- A total of 391 swabs were received from sentinel (30) and non-sentinel (361) surveillance.
- 113 viruses were identified: A(H3N2) (70) including four A/Perth/16/2009 (H3N2)-like viruses, A (Not subtyped) (24), B (15) including one B/Wisconsin/1/2010-like and A(H1N1)pdm09 (4).

In week 35, 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 137 consultations for ILI were reported from 79 general practices in 19 out of 20 DHBs. This gives a weekly consultation rate 36.7 of per 100 000 patient population, a decrease from 58.6 per 100 000 reported in week 34. Figure 1 shows the weekly national consultation rates for 2007–2012 to date.

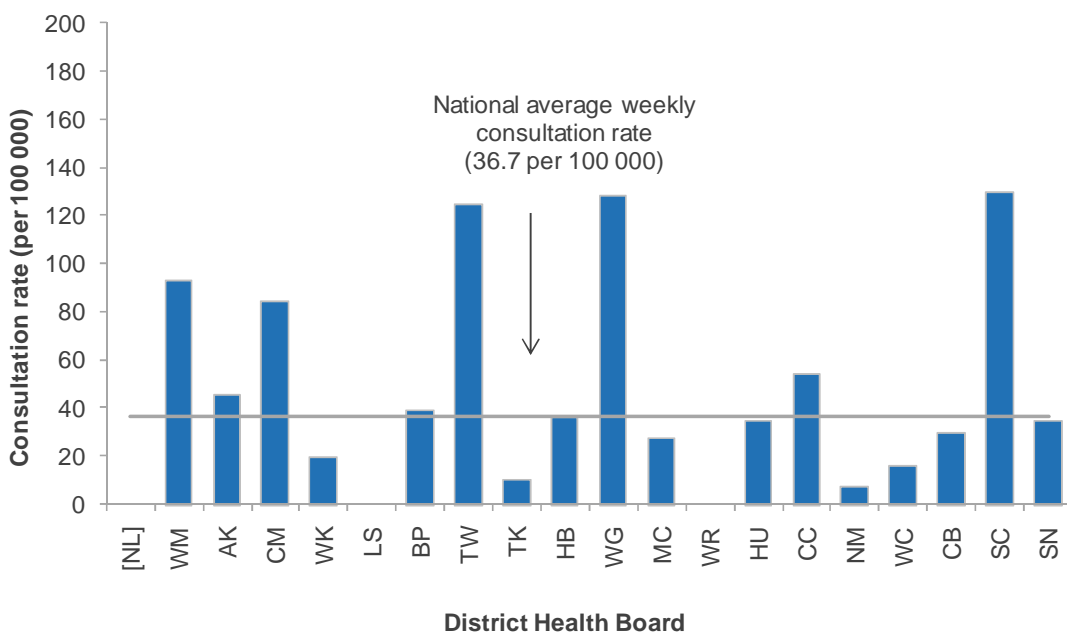
Figure 1. Weekly consultation rates for ILI in New Zealand, 2007–2012



* 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.

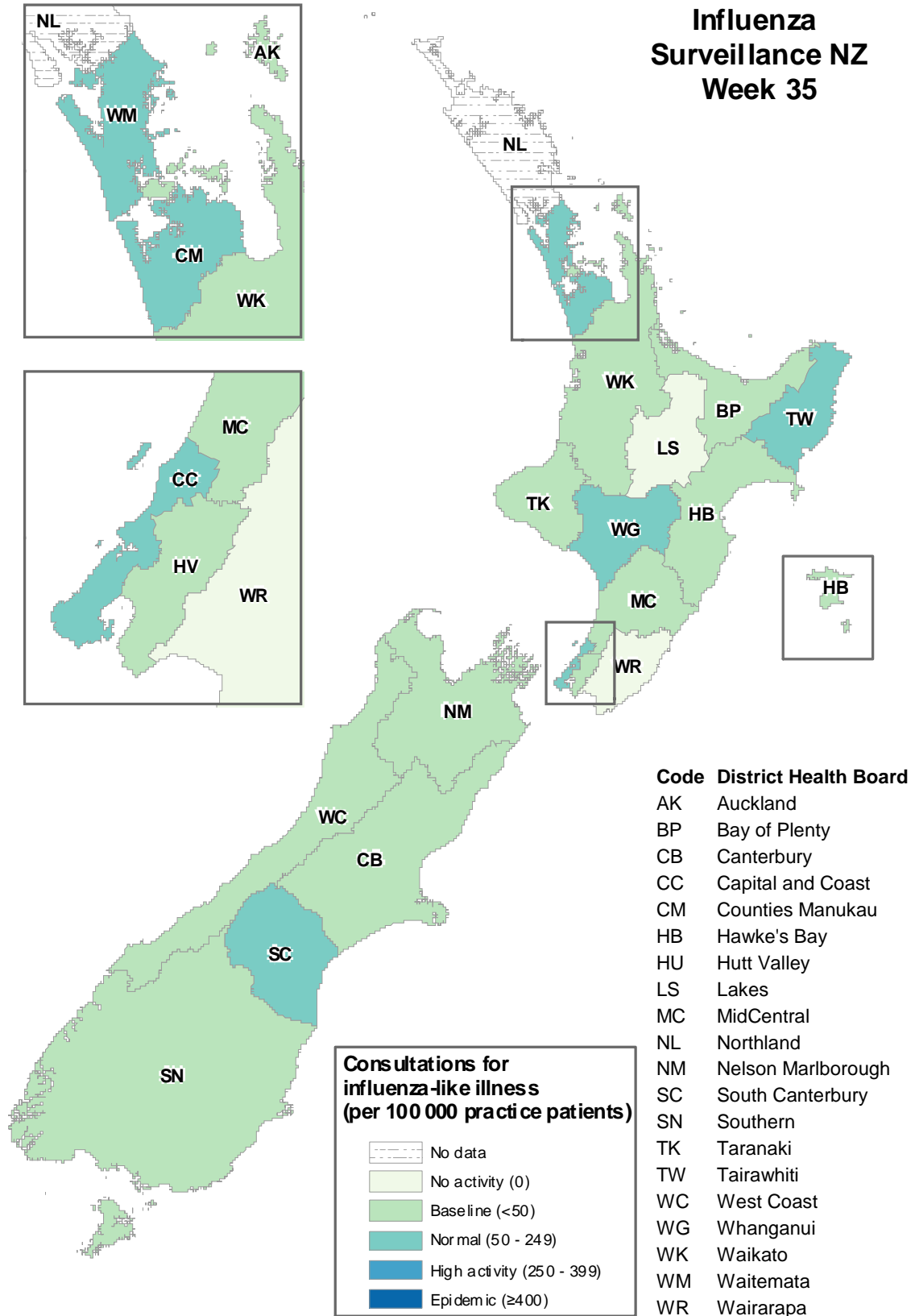
Figure 2 compares the consultation rates for ILI for each DHB over the past week. South Canterbury DHB had the highest consultation rate (129.6 per 100 000, 10 cases) followed by Whanganui (128.2 per 100 000, 10 cases). The following DHBs also had rates above the national average of 36.7 per 100 000: Tairāwhiti (124.5 per 100 000, 4 cases), Waitemata (92.9 per 100 000, 9 cases), Counties Manukau (84.8 per 100 000, 1 case), Capital and Coast (54.5 per 100 000, 12 cases), Auckland (45.4 per 100 000, 9 cases), and Bay of Plenty (39.1 per 100 000, 6 cases).

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



[] Not participating in sentinel influenza surveillance.

Figure 3. Consultation rates for ILI mapped by DHB for week 35, 2012



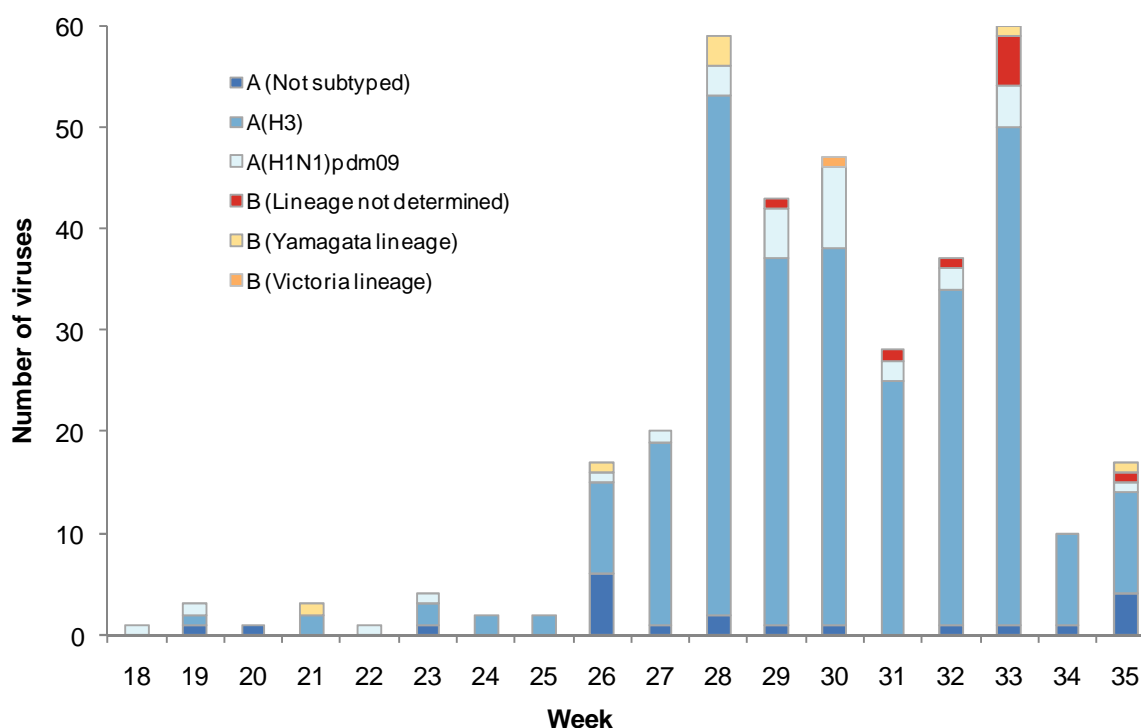
VIROLOGICAL SURVEILLANCE

A total of 30¹, swabs were received by virology laboratories from sentinel surveillance. Of these, 17 viruses were identified (Figure 4): A(H3N2) (8), A/Perth/16/2009 (H3N2)-like (2), A (Not subtyped) (4), A(H1N1)pdm09 (1), B (Lineage not determined) (1), and B/Wisconsin/1/2010-like (1). The distribution by DHB is shown in Table 1.

Table 1. Influenza viruses from sentinel surveillance for week 35 by DHB

Antigenic strain	DHB									Total
	AK/WM	WK	LS	WG	MC	HU	CC	NM	SN	
A (Not subtyped)	3	1	0	0	0	0	0	0	0	4
A(H1N1)pdm09	0	0	0	0	0	0	0	1	0	1
A(H3N2)	0	0	1	1	3	0	1	1	1	8
A/Perth/16/2009 (H3N2)-like	0	0	0	1	0	1	0	0	0	2
B (Lineage not determined)	0	0	0	0	0	0	0	1	0	1
B/Wisconsin/1/2010-like	0	0	0	0	0	0	0	0	1	1
Total	3	1	1	2	3	1	1	3	2	17

Figure 4. Total influenza viruses from sentinel surveillance by type and week reported, week 18–35



In addition, 361¹ swabs were received by virology laboratories from non-sentinel surveillance. Of these, 96 viruses were identified (Figure 5): A(H3N2) (58), A/Perth/16/2009 (H3N2)-like (2), A (Not subtyped) (20), B (Lineage not determined) (13), 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 35 by DHB

	DHB										Total
	AK/WM	CM	WK	LS	BP	HB	CC	CB	SC	SN	
A (Not subtyped)	10	0	8	1	1	0	0	0	0	0	20
A(H1N1)pdm09	1	0	0	0	0	0	0	2	0	0	3
A(H3N2)	10	18	5	0	0	4	6	12	2	1	58
A/Perth/16/2009 (H3N2)-like	0	2	0	0	0	0	0	0	0	0	2
B (Lineage not determined)	5	4	2	0	0	0	2	0	0	0	13
Total	26	24	15	1	1	4	8	14	2	1	96

Figure 5. Total influenza viruses from non-sentinel surveillance by type and week reported, week 18–35 and the total percentage positive from the swabs received

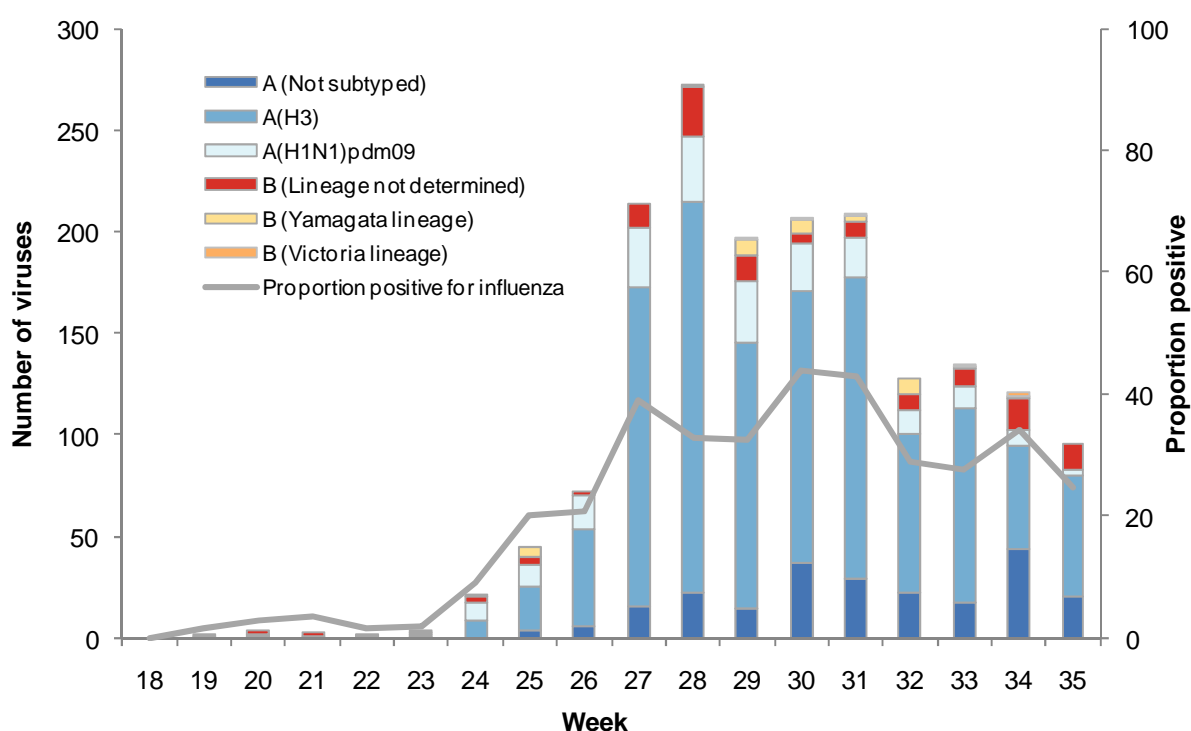
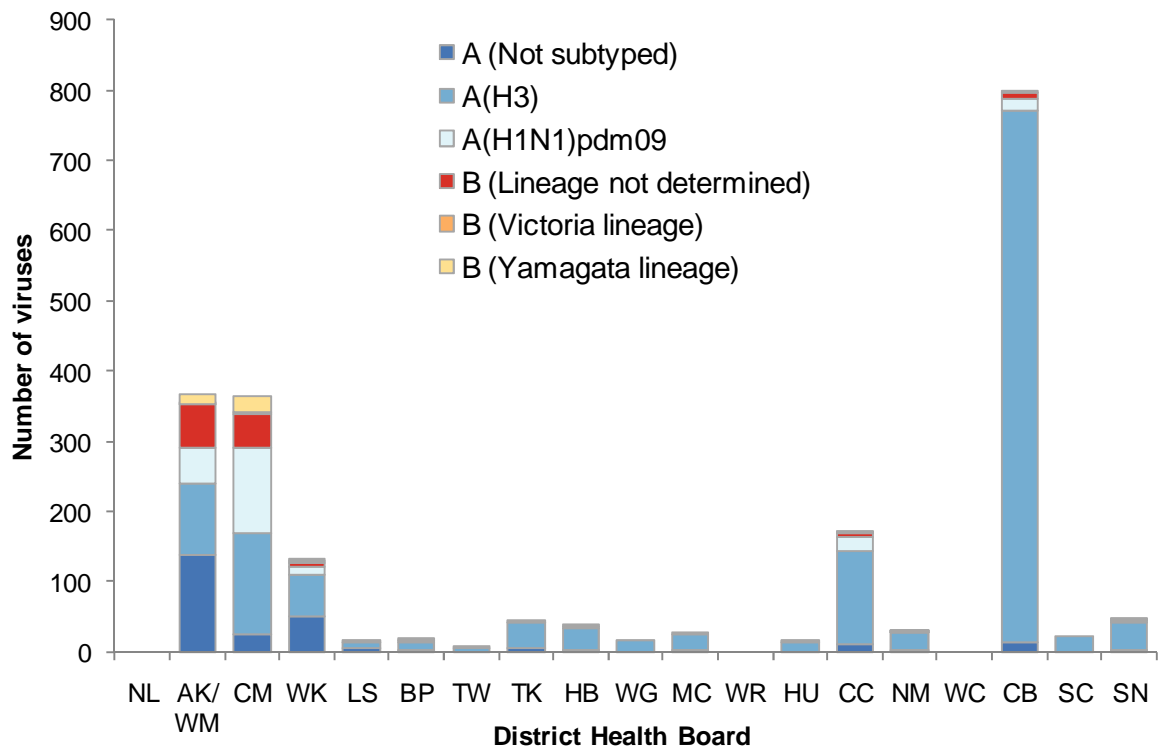


Figure 6 shows the cumulative total of influenza viruses confirmed (sentinel and non-sentinel surveillance) from week 1 to the end of week 35 (2 September 2012) in each DHB. A total of 2113 influenza viruses were identified: influenza A(H3N2) (1433) including 289 A/Perth/16/2009 (H3N2)-like viruses, B (193) including 11 of B/Brisbane/60/2008-like (belonging to the B/Victoria lineage) and 47 B/Wisconsin/1/2010-like viruses (belonging to the B/Yamagata lineage), A(H1N1)pdm09 (235) including 69 A/California/7/2009 (H1N1)-like virus, and A (Not subtyped) (252). 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 35, 2 September 2012



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