

INFLUENZA WEEKLY UPDATE

2012/28: 9 – 15 July 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 28 (9 – 15 July 2012).

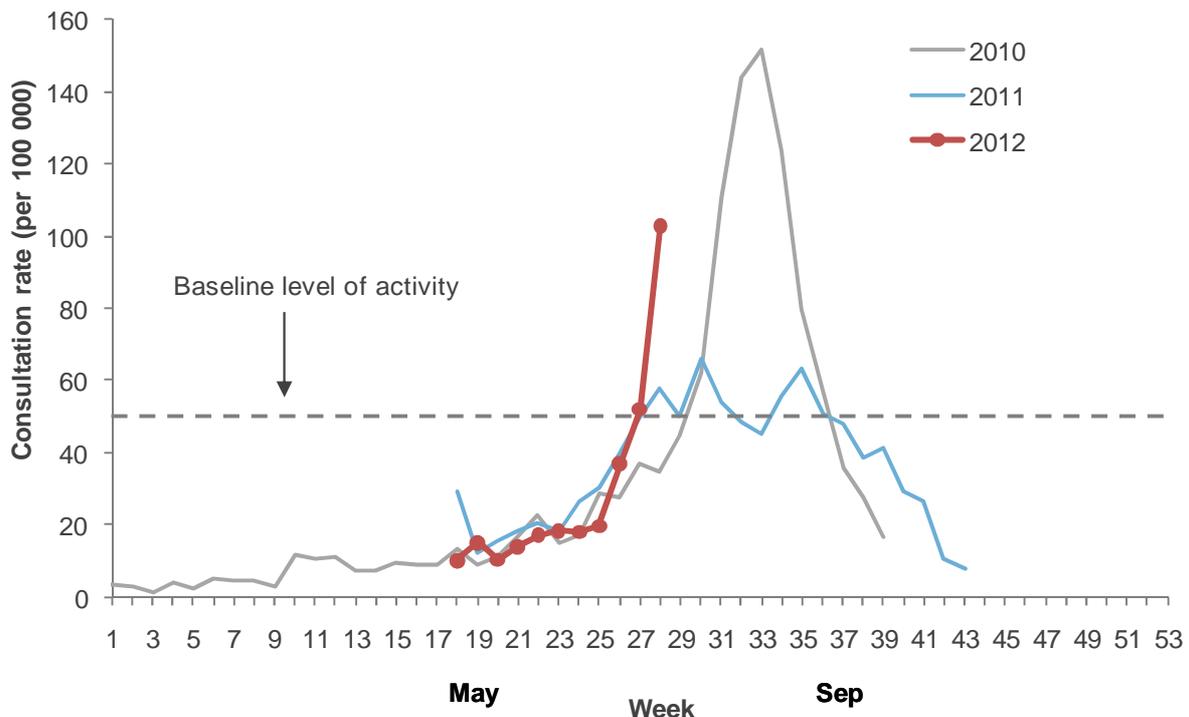
Summary

ILI through sentinel surveillance was reported from 19 out of 20 District Health Boards (DHB) with a national consultation rate of 102.8 per 100 000 (399 ILI consultations). A total of 905 swabs were received from sentinel (79) and non-sentinel (826) surveillance. 331 viruses were identified: A(H3N2) (232), A (Not subtyped) (35), A(H1N1)pdm09 (31), B (Lineage not determined) (26), A/Perth/16/2009 (H3N2)-like (5) and B/Wisconsin/1/2010-like (2).

INFLUENZA-LIKE ILLNESS SURVEILLANCE

In the past week, a total of 399 consultations for ILI were reported from 84 general practices in 19 out of 20 DHBs. This gives a weekly consultation rate of 102.8 per 100 000 patient population. Figure 1 shows the weekly national consultation rates for 2010, 2011 seasons, and 2012 to date. This week's ILI rate is double the rate reported in week 27 (51.9 per 100 000).

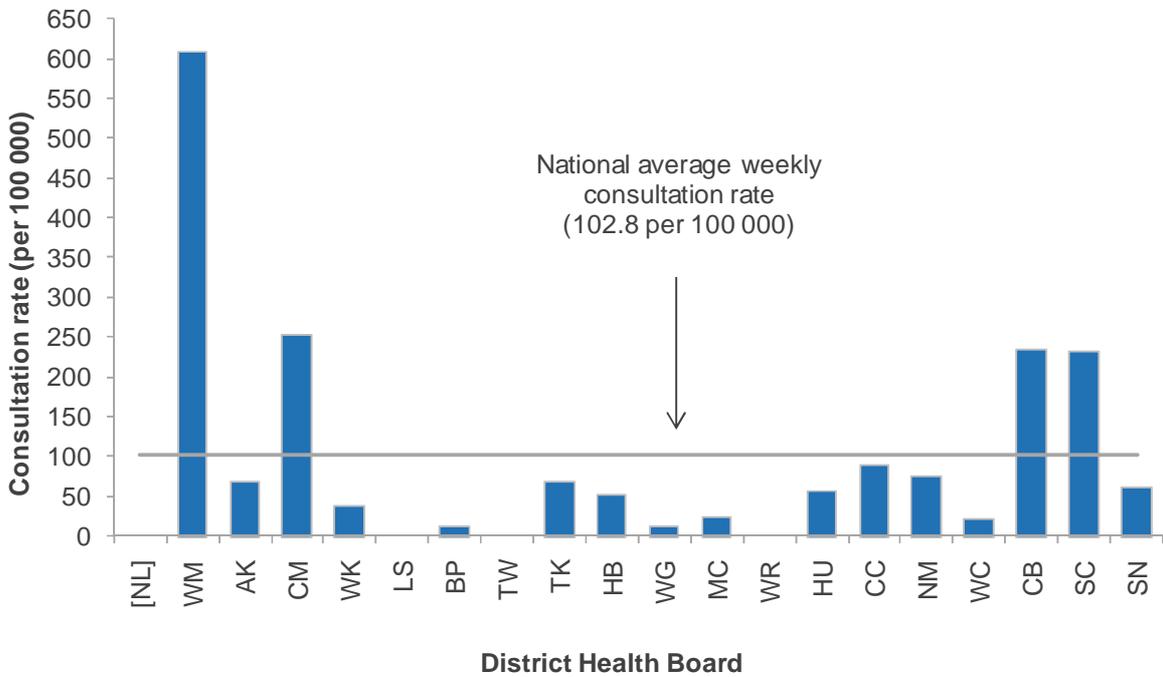
Figure 1: Weekly consultation rates for ILI in New Zealand, 2010, 2011 and 2012



* 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.

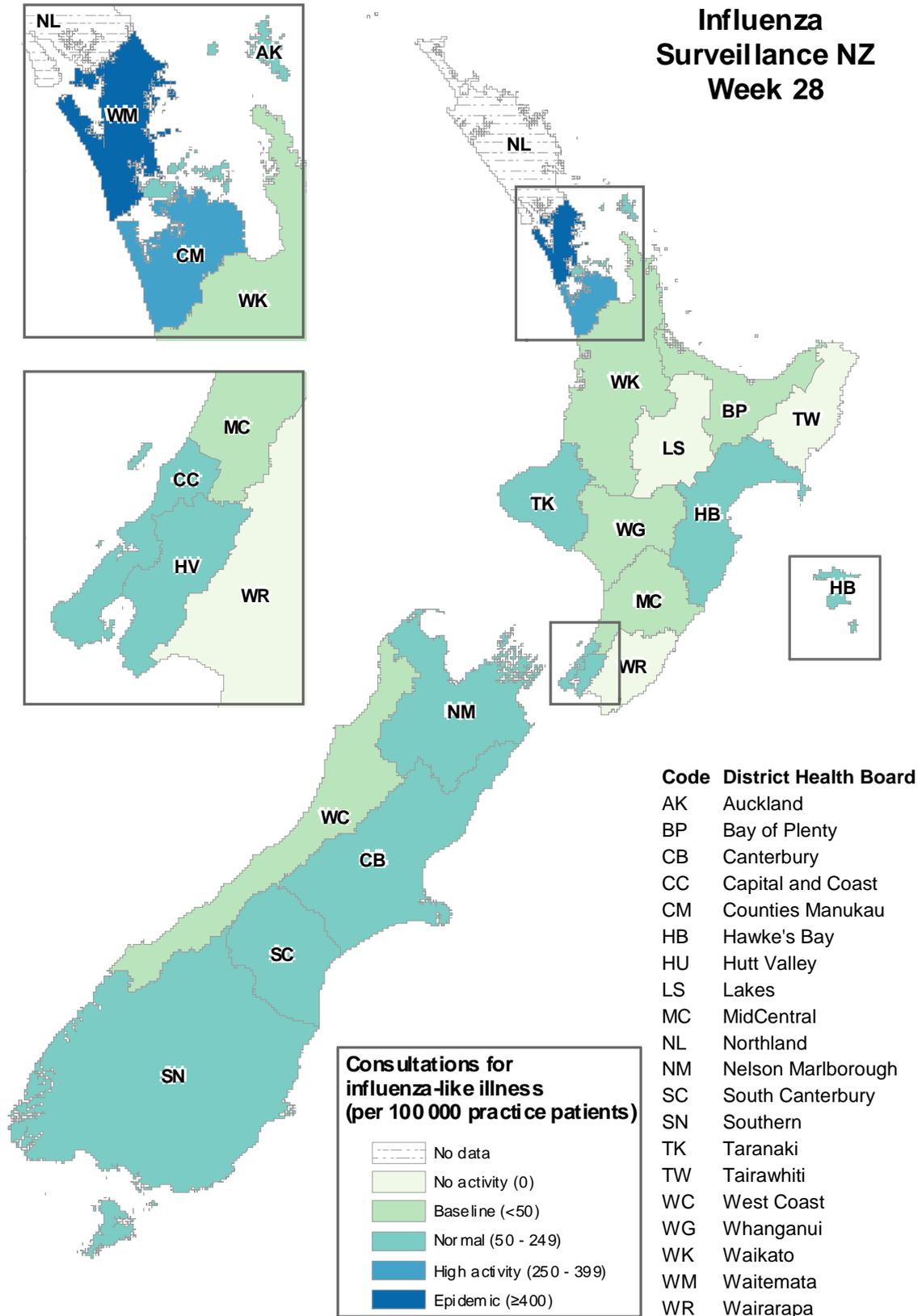
Figure 2 compares the consultation rates for ILI for each DHB over the past week. **Waitemata DHB had the highest consultation rate (608.8 per 100 000, 59 cases)**, followed by Counties Manukau (254.5 per 100 000, 3 cases), Canterbury (235.5 per 100 000, 167 cases) and South Canterbury (233.3 per 100 000, 18 cases).

Figure 2: Weekly consultation rates for ILI by DHB week ending 15 July 2012



[] Not participating in sentinel influenza surveillance.

Figure 3: Consultation rates for ILI mapped by DHB for week 28, 2012



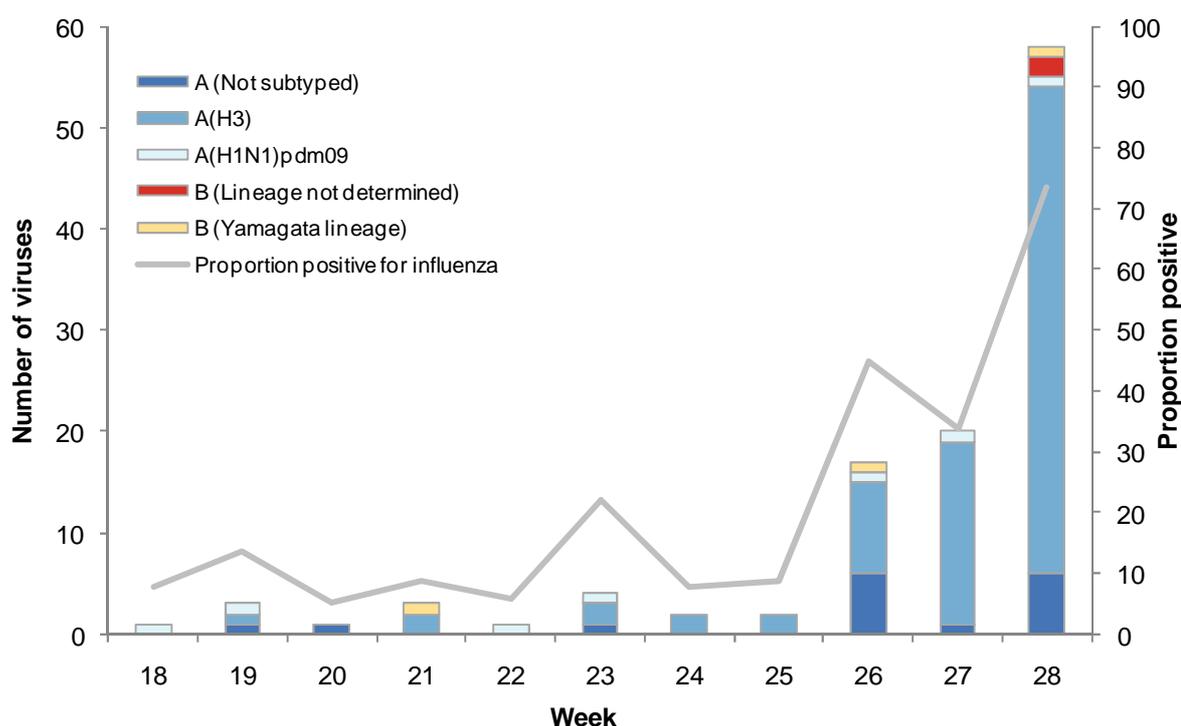
VIROLOGICAL SURVEILLANCE

A total of 79 swabs were received by virology laboratories from sentinel surveillance. Of these, 58 viruses were identified (Figure 4): A(H3N2) (44), A (Not subtyped) (6), A/Perth/16/2009 (H3N2)-like (4), B (Lineage not determined) (2), A(H1N1)pdm09 (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 28 by DHB

Antigenic Strain	DHB									Total
	AK/WM	TK	HB	MC	CC	NM	CB	SC	SN	
A (Not subtyped)	1	2	1	0	1	1	0	0	0	6
A(H1N1)pdm09	0	0	0	0	0	0	1	0	0	1
A(H3N2)	0	1	1	1	3	1	34	1	2	44
A/Perth/16/2009 (H3N2)-like	0	2	1	0	0	1	0	0	0	4
B (Lineage not determined)	2	0	0	0	0	0	0	0	0	2
B/Wisconsin/1/2010-like	0	0	0	0	1	0	0	0	0	1
Total	3	5	3	1	5	3	35	1	2	58

Figure 4: Total influenza viruses from sentinel surveillance by type and week reported, week 18–28 and the total percentage positive from the swabs received



In addition, 826 swabs were received by virology laboratories from non-sentinel surveillance. Of these, 273 viruses were identified (Figure 5): A(H3N2) (188), A(H1N1)pdm09 (30), A (Not subtyped) (29), B (Lineage not determined) (24), A/Perth/16/2009 (H3N2)-like (1) and B/Wisconsin/1/2010-like (1). The distribution by DHB is shown in Table 2.

Table 2: Influenza viruses from non-sentinel surveillance for week 28 by DHB

Antigenic Strain	DHB											Total
	AK/WM	CM	WK	LS	TK	HB	MC	CC	NM	CB	SN	
A (Not subtyped)	22	0	1	2	0	0	1	0	0	3	0	29
A(H1N1)pdm09	1	20	0	0	1	2	0	3	0	3	0	30
A(H3N2)	0	8	0	0	2	1	0	6	0	169	2	188
A/Perth/16/2009 (H3N2)-like	0	0	0	0	0	0	0	0	1	0	0	1
B (Lineage not determined)	6	13	0	0	0	0	0	0	0	3	2	24
B/Wisconsin/1/2010-like	0	1	0	0	0	0	0	0	0	0	0	1
Total	29	42	1	2	3	3	1	9	1	178	4	273

Figure 5: Total influenza viruses from non-sentinel surveillance by type and week reported, week 18–28 and the total percentage positive from the swabs received

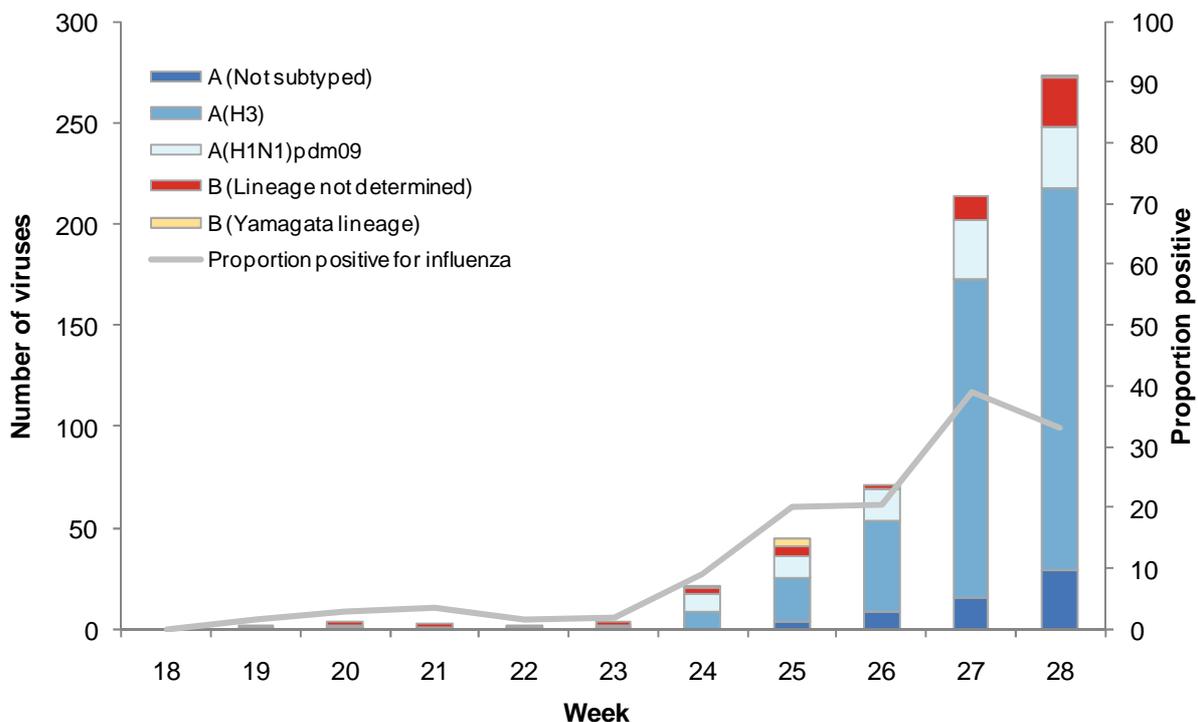
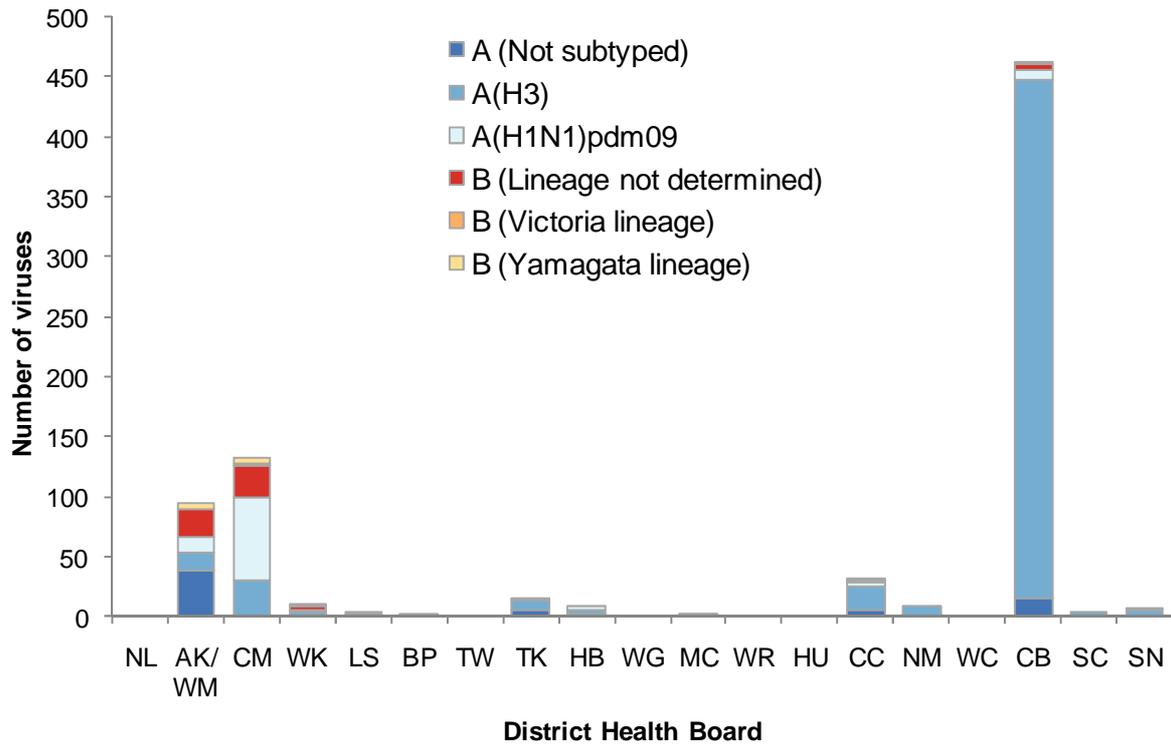


Figure 6 shows the cumulative total of influenza viruses confirmed (sentinel and non-sentinel surveillance) from week 1 to the end of week 28 (15 July 2012) in each DHB. A total of 777 influenza viruses were identified: influenza A(H3N2) (525) including 30 A/Perth/16/2009 (H3N2)-like viruses, B (76) including four of B/Brisbane/60/2008-like (belonging to the B/Victoria lineage) and 13 B/Wisconsin/1/2010-like viruses (belonging to the B/Yamagata lineage), A(H1N1)pdm09 (102) including 10 A/California/7/2009 (H1N1)-like virus, and A (Not subtyped) (74). The highest numbers were from the Canterbury DHB, followed by Counties Manukau and Auckland 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 28, 15 July 2012



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