



INFLUENZA WEEKLY UPDATE

2012/33: 13 – 19 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 33 (13 – 19 August 2012).

Summary

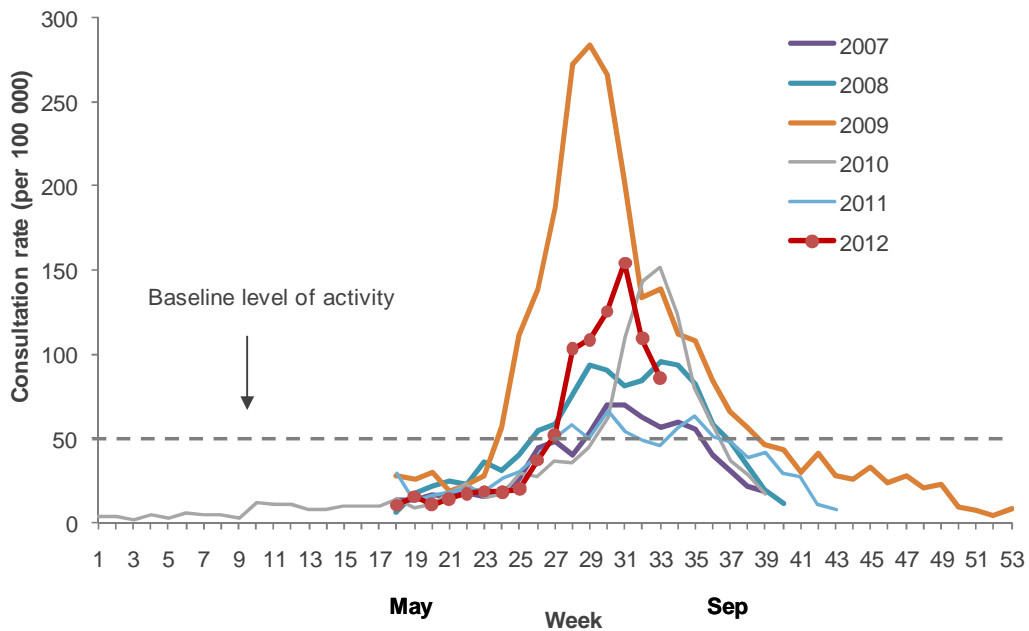
- ILI through sentinel surveillance was reported from 19 out of 20 District Health Boards (DHB) with a national consultation rate of 85.5 per 100 000 (305 ILI consultations).
- A total of 538 swabs were received from sentinel (49) and non-sentinel (489) surveillance.
- 196 viruses were identified: A(H3N2) (131) including 22 A/Perth/16/2009 (H3N2)-like viruses, A (Not subtyped) (34), B (17) including one B/Brisbane/60/2008-like and one B/Wisconsin/1/2010-like, and A(H1N1)pdm09 (14) including three A/California/7/2009 (H1N1)-like virus.

In week 33, ILI consultations have dropped and the proportion of positive influenza samples has increased slightly. 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 305 consultations for ILI were reported from 80 general practices in 19 out of 20 DHBs. This gives a weekly consultation rate of 85.5 per 100 000 patient population, a decrease from 109.2 per 100 000 reported in week 32. Figure 1 shows the weekly national consultation rates for 2007–2012 to date.

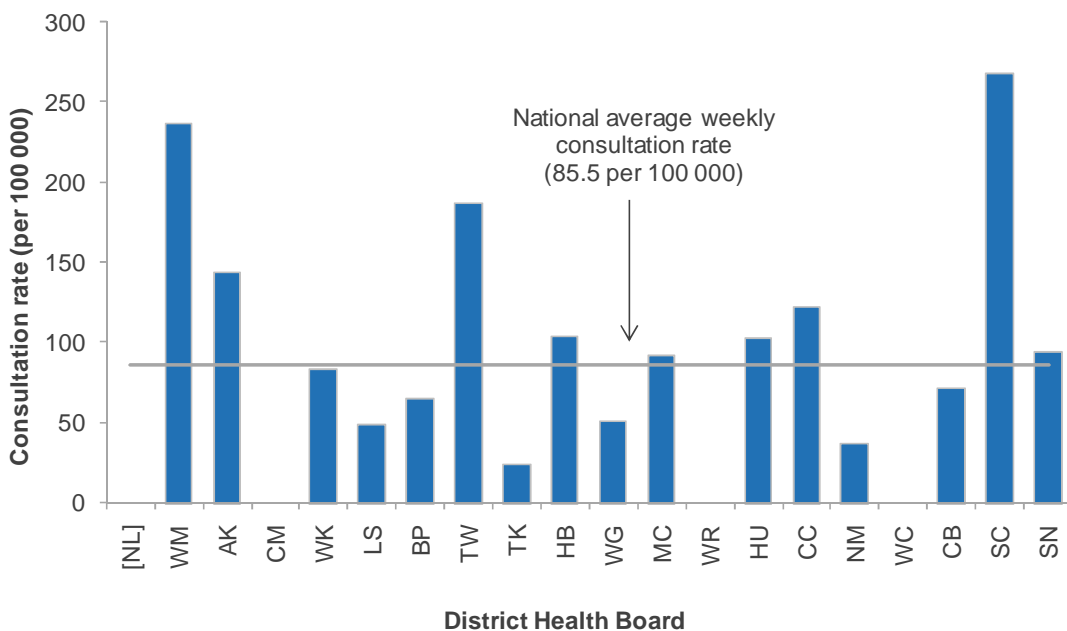
Figure 1. Weekly consultation rates for ILI in New Zealand, 2007–2012



* 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.

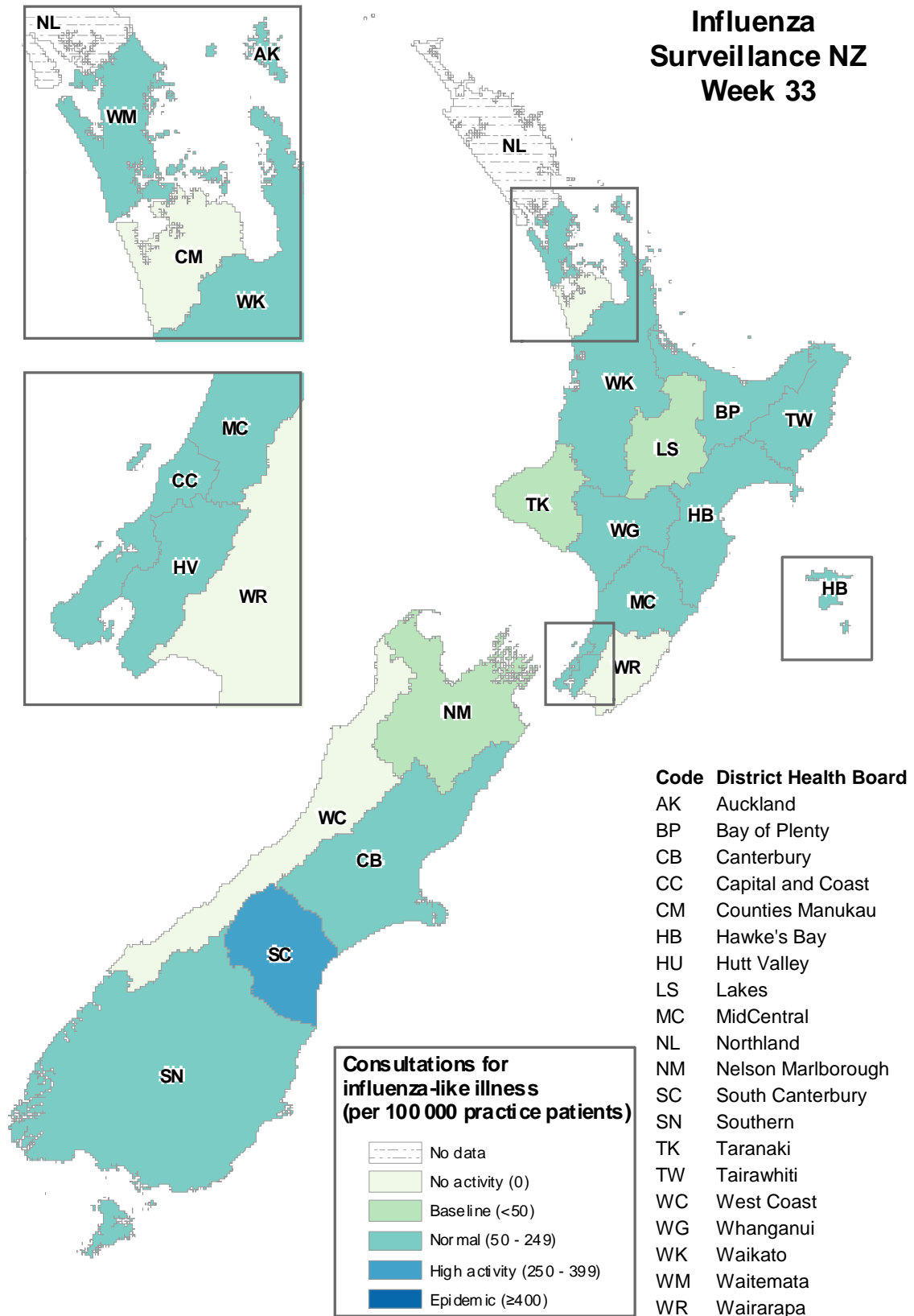
Figure 2 compares the consultation rates for ILI for each DHB over the past week. South Canterbury DHB had the highest consultation rate (268.7 per 100 000, 14 cases) followed by Waitemata (237.3 per 100 000, 23 cases). The following DHBs also had rates above the national average of 85.5 per 100 000: Tairāwhiti (186.7 per 100 000, 6 cases), Auckland (144.0 per 100 000, 30 cases), Capital and Coast (122.5 per 100 000, 27 cases), Hawke’s Bay (103.9 per 100 000, 20 cases), Hutt Valley (103.2 per 100 000, 16 cases), Southern (94.2 per 100 000, 54 cases), and MidCentral (91.8 per 100 000, 19 cases).

Figure 2. Weekly consultation rates for ILI by DHB week ending 19 August 2012



[] Not participating in sentinel influenza surveillance.

Figure 3. Consultation rates for ILI mapped by DHB for week 33, 2012



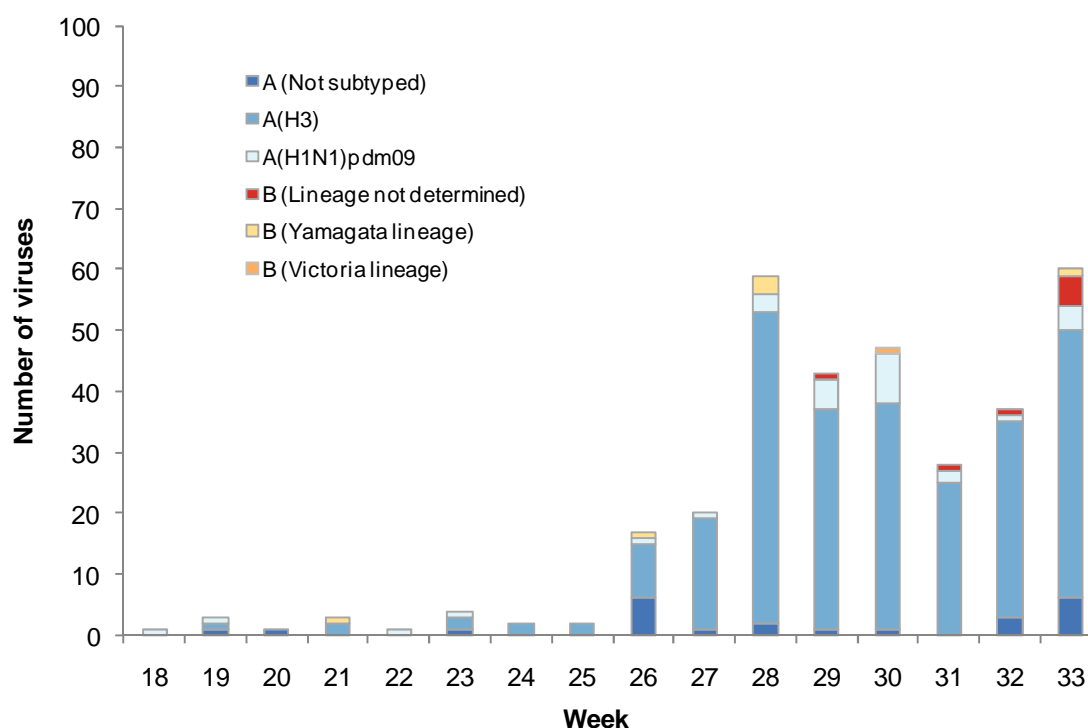
VIROLOGICAL SURVEILLANCE

A total of 49¹, swabs were received by virology laboratories from sentinel surveillance. Of these, 60² viruses were identified (Figure 4): A(H3N2) (30) and A/Perth/16/2009 (H3N2)-like (14), A(H1N1)pdm09 (2) and A/California/7/2009 (H1N1)-like (2), A (Not subtyped) (6), B (Lineage not determined) (5), 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 33 by DHB

Antigenic strain	DHB													Total
	AK/WM	WK	LS	BP	TK	HB	WG	MC	HU	CC	NM	CB	SN	
A (Not subtyped)	4	1	0	0	0	0	0	1	0	0	0	0	0	6
A(H1N1)pdm09	0	0	0	0	0	0	0	0	0	1	0	1	0	2
A/California/7/2009 (H1N1)-like	0	0	0	1	0	0	0	0	0	0	0	0	1	2
A(H3N2)	0	0	2	0	1	6	4	0	2	5	3	4	3	30
A/Perth/16/2009 (H3N2)-like	0	0	0	0	2	3	1	0	0	2	0	0	6	14
B (Lineage not determined)	3	0	0	1	0	0	0	0	0	1	0	0	0	5
B/Wisconsin/1/2010-like	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Total	7	1	2	2	3	10	5	1	2	9	3	5	10	60

Figure 4. Total influenza viruses from sentinel surveillance by type and week reported, week 18–33



In addition, 489¹ swabs were received by virology laboratories from non-sentinel surveillance. Of these, 135 viruses were identified (Figure 5): A(H3N2) (79) and A/Perth/16/2009 (H3N2)-like (8), A(H1N1)pdm09 (8) and A/California/7/2009 (H1N1)-like (1), A (Not subtyped) (28), B (Lineage not determined) (10), and B/Brisbane/60/2008-like (1). The distribution by DHB is shown in Table 2.

¹ Data is from 5/6 virology laboratories.

² Include late reported data.

Table 2. Influenza viruses from non-sentinel surveillance for week 33 by DHB

Antigenic strain	DHB										Total
	AK/WM	CM	WK	LS	BP	TK	MC	CC	CB	SC	
A (Not subtyped)	15	2	7	0	1	0	0	3	0	0	28
A(H1N1)pdm09	0	6	0	0	0	0	0	1	1	0	8
A/California/7/2009 (H1N1)-like	0	0	1	0	0	0	0	0	0	0	1
A(H3N2)	3	27	10	1	0	1	5	22	9	1	79
A/Perth/16/2009 (H3N2)-like	0	7	0	0	0	0	0	0	1	0	8
B (Lineage not determined)	6	3	0	0	0	0	0	1	0	0	10
B/Brisbane/60/2008-like	0	1	0	0	0	0	0	0	0	0	1
Total	24	46	18	1	1	1	5	27	11	1	135

Figure 5. Total influenza viruses from non-sentinel surveillance by type and week reported, week 18–33 and the total percentage positive from the swabs received

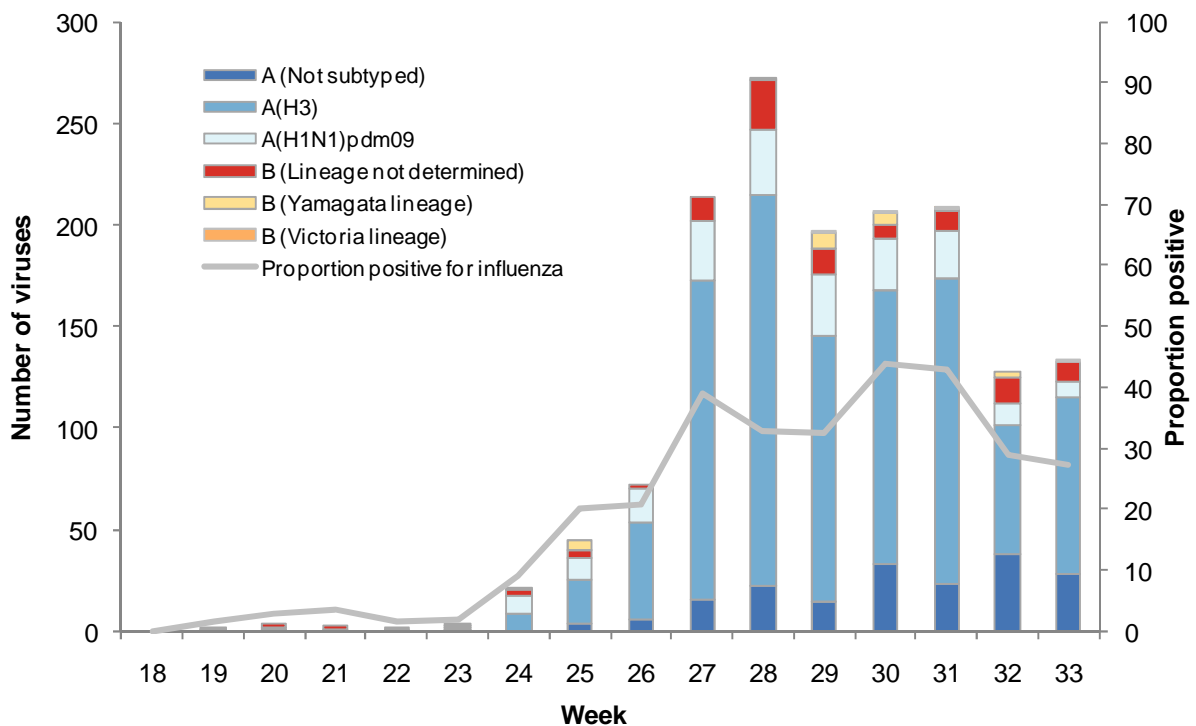
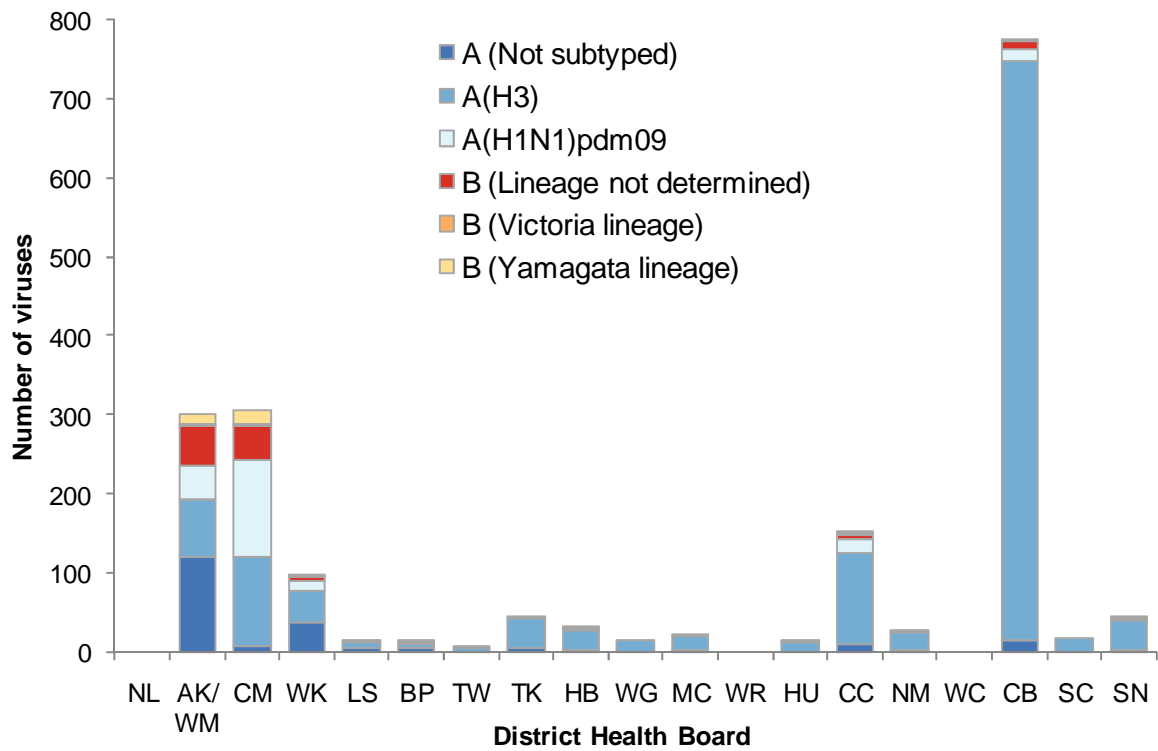


Figure 6 shows the cumulative total of influenza viruses confirmed (sentinel and non-sentinel surveillance) from week 1 to the end of week 33 (19 August 2012) in each DHB. A total of 1869 influenza viruses were identified: influenza A(H3N2) (1276) including 196 A/Perth/16/2009 (H3N2)-like viruses, B (160) including nine of B/Brisbane/60/2008-like (belonging to the B/Victoria lineage) and 36 B/Wisconsin/1/2010-like viruses (belonging to the B/Yamagata lineage), A(H1N1)pdm09 (226) including 56 A/California/7/2009 (H1N1)-like virus, and A (Not subtyped) (207). The highest numbers were from the Canterbury DHB, followed by Counties Manukau and Auckland/Waitemata 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 33, 19 August July 2012



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