

INFLUENZA WEEKLY UPDATE

2011/41: 10 – 16 October 2011

The national influenza surveillance system in New Zealand is an essential public health tool for assessing incidence and trends as well as implementing strategies to control influenza. This report summarises the data collected from sentinel general practice (GP) surveillance and non-sentinel surveillance for week 41 (10 – 16 October 2011).

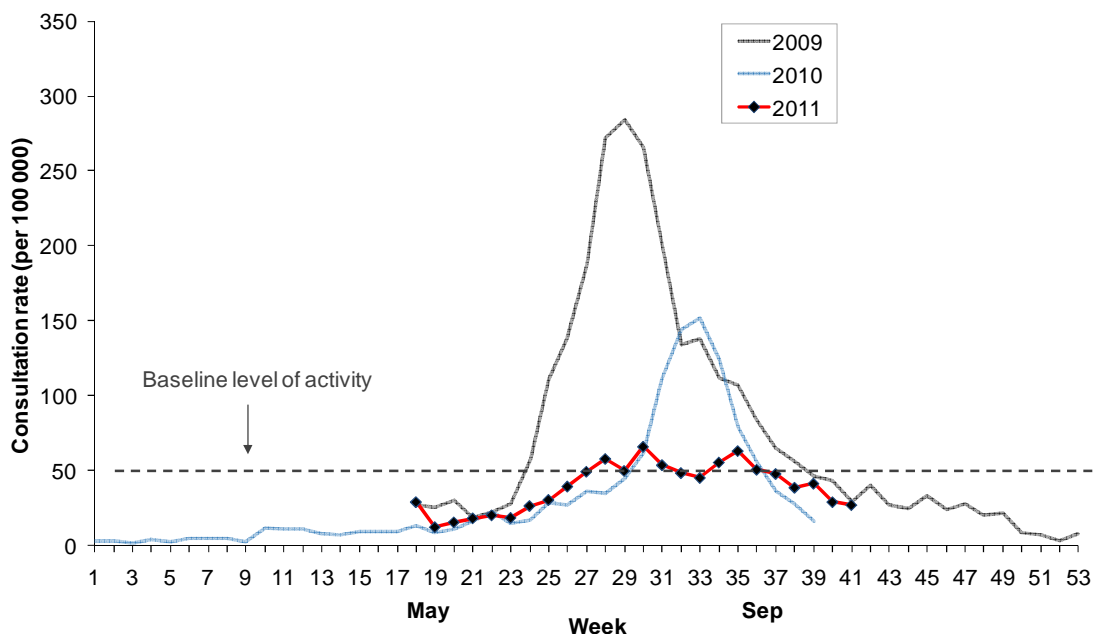
SUMMARY OF THIS REPORT:

Influenza-like illness (ILI) through sentinel surveillance was reported in all 19 of 20 District Health Boards (DHB) giving an overall national consultation rate of 27.0 per 100 000 (106 ILI consultations). Two hundred and sixty-six swabs were received from sentinel (22) and non-sentinel surveillance (244). Forty-three viruses were identified from sentinel (12) and non-sentinel surveillance (31). These were: A(H3N2) (26), A (not sub-typed) (9), B (7) and A(H1N1)pdm09ⁱ (1).

INFLUENZA-LIKE ILLNESS SURVEILLANCE

In the past week, a total of 106 consultations for influenza-like illness were reported from 84 general practices in 19 of 20 DHBs. This gives a weekly national consultation rate of 27.0 per 100 000 patient population (lower than the consultation rate of 29.0 per 100 000 in week 40). Figure 1 shows the weekly national consultation rates for 2009, 2010 seasons, and 2011 so far. The current rate of influenza-like illness is below the baseline.

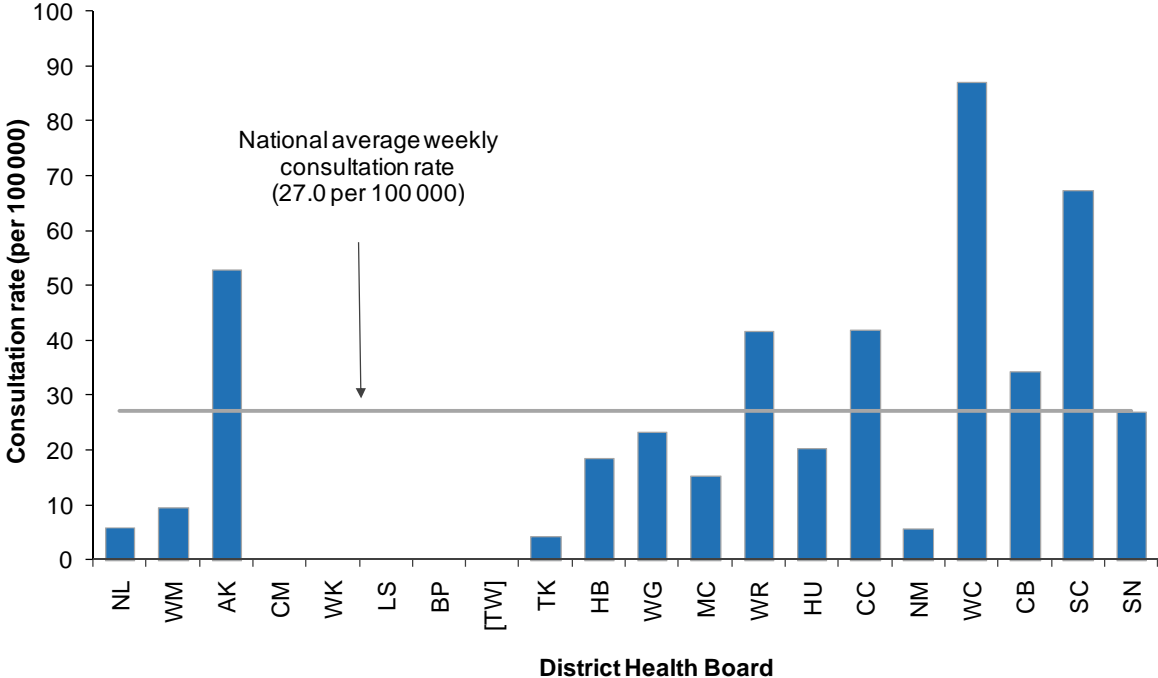
Figure 1: Weekly consultation rates for influenza-like illness in New Zealand, 2009, 2010 and 2011



* 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 influenza-like illness for each DHB over the past week. West Coast DHB (87.0 per 100 000, 15 cases) had the highest consultation rate, followed by South Canterbury (67.4 per 100 000, 5 cases) and Auckland (52.9 per 100 000, 13 cases).

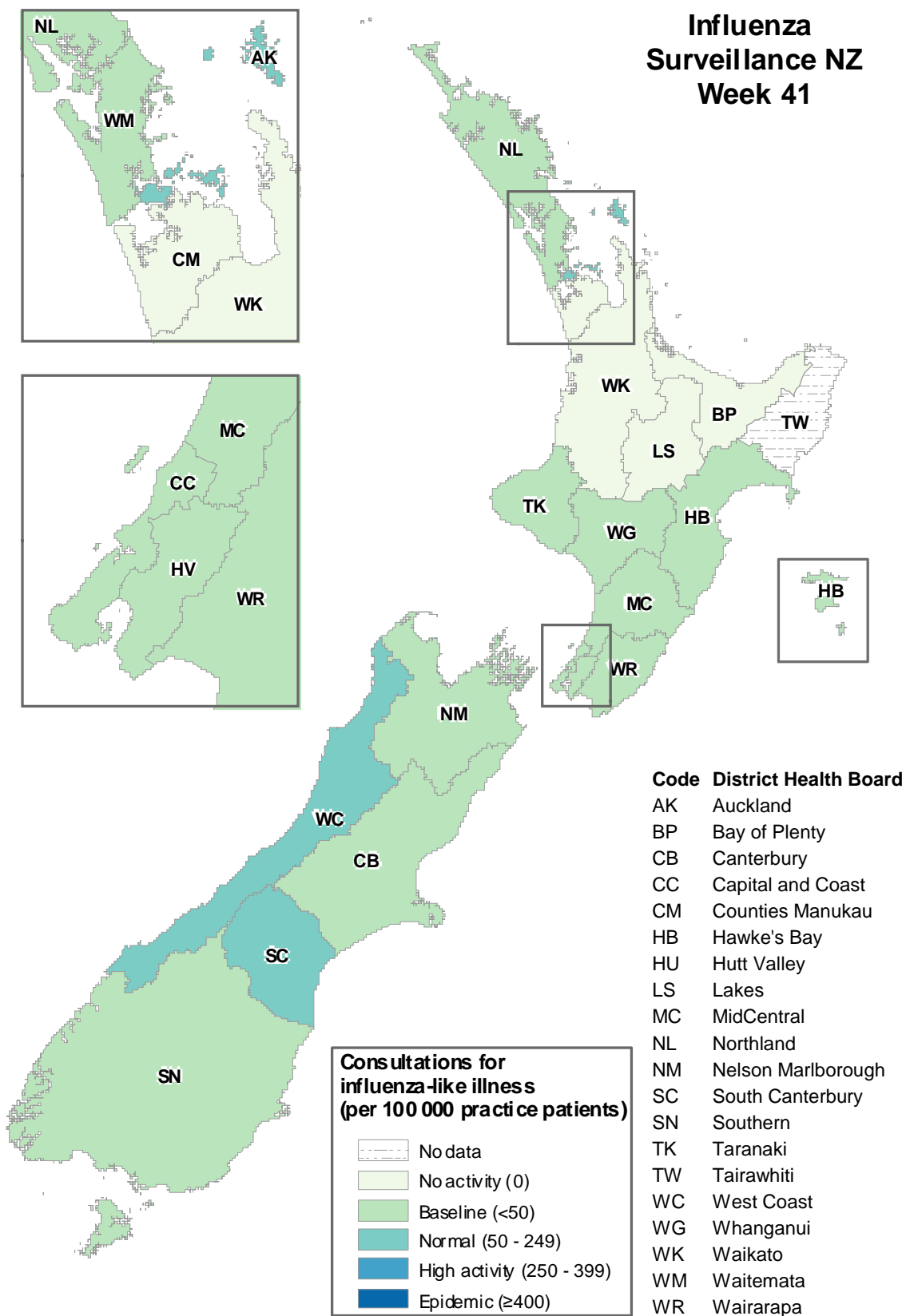
Figure 2: Weekly consultation rates for influenza-like illness by DHB, week ending 16 October 2011



[] Health district did not participate for the week.

Figure 3 maps the consultation rates for influenza-like illness by DHB.

Figure 3: Consultation rates for influenza-like illness mapped by DHB for week 41, 2011



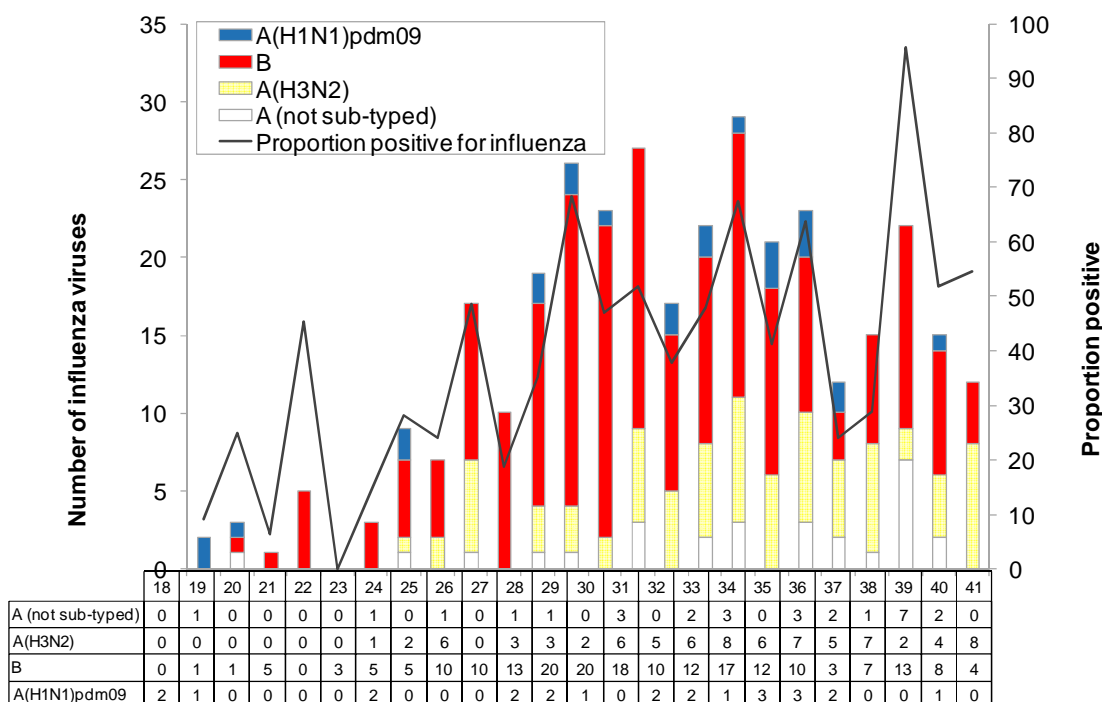
VIROLOGICAL SURVEILLANCE

A total of 22 swabs were received by virology laboratories from sentinel surveillance. Of these, 12 viruses were identified: A(H3N2) (8) and B (4). The distribution by DHB is shown in Table 1.

Table 1: Influenza viruses from sentinel surveillance for week 41 by DHB

Antigenic Strain	AK	BP	WG	MC	HU	NM	WC	CB	SN	Total
A(H3N2)	1	2	1	1	0	1	1	1	0	8
B	0	0	0	0	1	0	1	0	2	4
Total	1	2	1	1	1	1	2	1	2	12

Figure 4: Total influenza viruses from sentinel surveillance by type and week reported, weeks 18–41 and the total percentage positive from the swabs received



In addition, 244 swabs were received by virology laboratories from non-sentinel surveillance. Of these, 31 viruses were identified: A(H3N2) (18), A (not sub-typed) (9), B (3) and A(H1N1)pdm09 (1) (Figure 5). The distribution by DHB is shown in Table 2.

Table 2: Influenza viruses from non-sentinel surveillance for week 41 by DHB

Antigenic Strain	NL	WM	AK	CM	WK	BP	MC	CC	CB	SN	Total
A (not sub-typed)	0	1	1	2	1	0	0	2	2	0	9
A(H3N2)	2	0	2	0	0	1	2	3	7	1	18
B	0	0	1	0	0	0	0	0	2	0	3
A(H1N1)pdm09	0	0	0	1	0	0	0	0	0	0	1
Total	2	1	4	3	1	1	2	5	11	1	31

Figure 5: Total influenza viruses from non-sentinel surveillance by type and week reported, weeks 18–41 and the total percentage positive from the swabs received

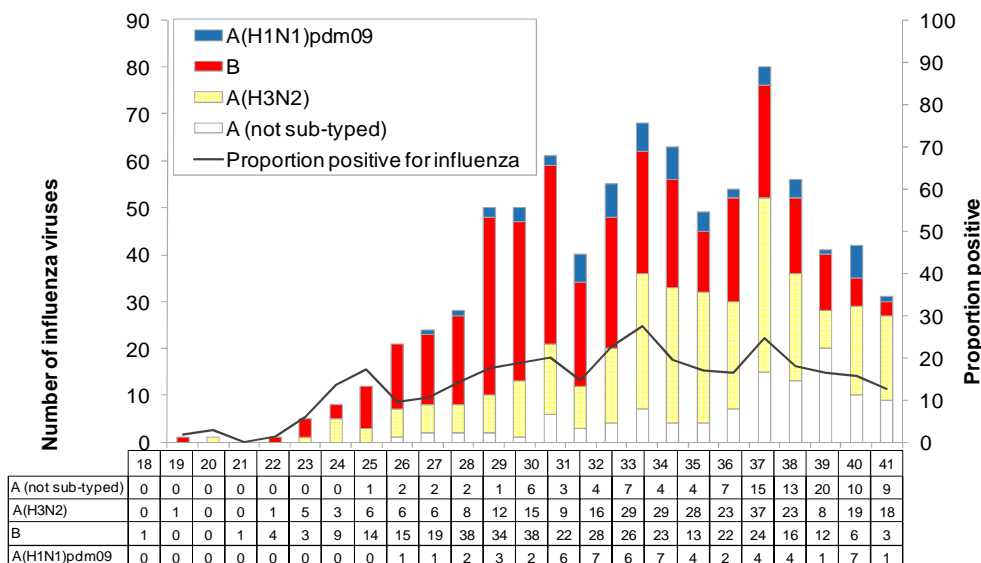
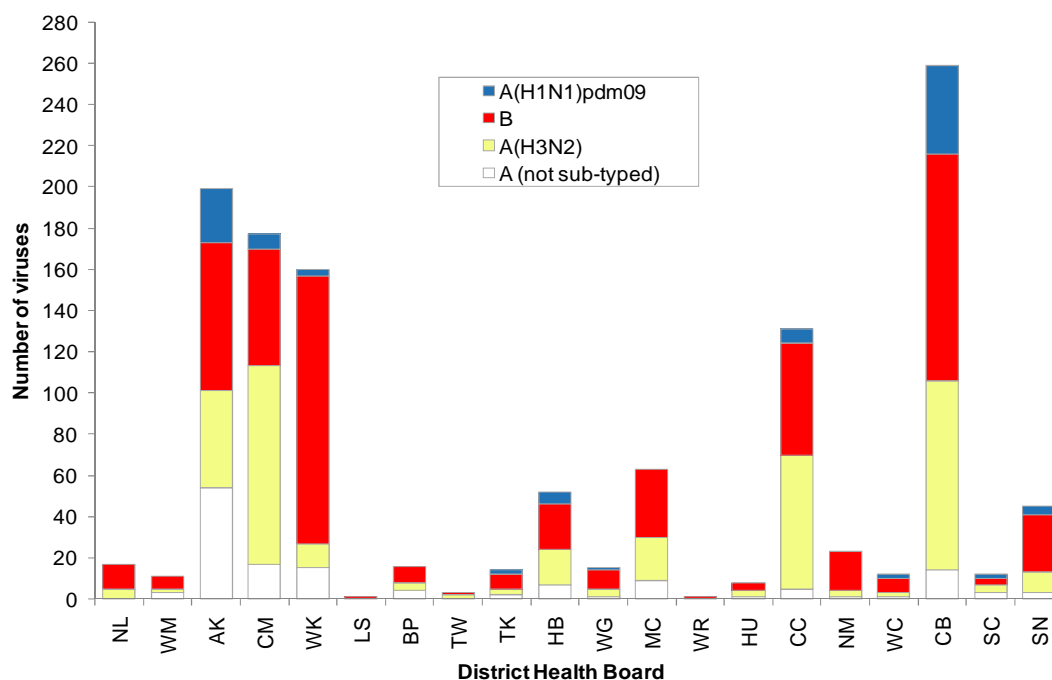


Figure 6 shows the cumulative total of influenza viruses confirmed (sentinel and non-sentinel surveillance) from week 1 to the end of week 41 (16 October 2011). A total of 1219 influenza viruses were identified: influenza B (584) including 258 of B/Brisbane/60/2008 - like viruses and three B/Florida/4/2006 - like virus, A(H1N1)pdm09 (103) including 19 A/California/7/2009 (H1N1) - like virus, A (H3N2) (392) including 167 A/Perth/16/2009 (H3N2) - like virus, and A (not sub-typed) (140). The major circulating influenza strains (B/Brisbane/60/2008 - like, A/California/7/2009 (H1N1) - like and A/Perth/16/2009 (H3N2) - like strains) are covered by the current influenza vaccine.

Figure 6: Cumulative laboratory-confirmed viruses by DHB from week 1 to week 41, 16 October 2011



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ⁱ Pandemic A(H1N1)09 is now called A(H1N1)pdm09