

INFLUENZA WEEKLY UPDATE

2011/39: 26 September – 2 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 39 (26 September – 2 October 2011).

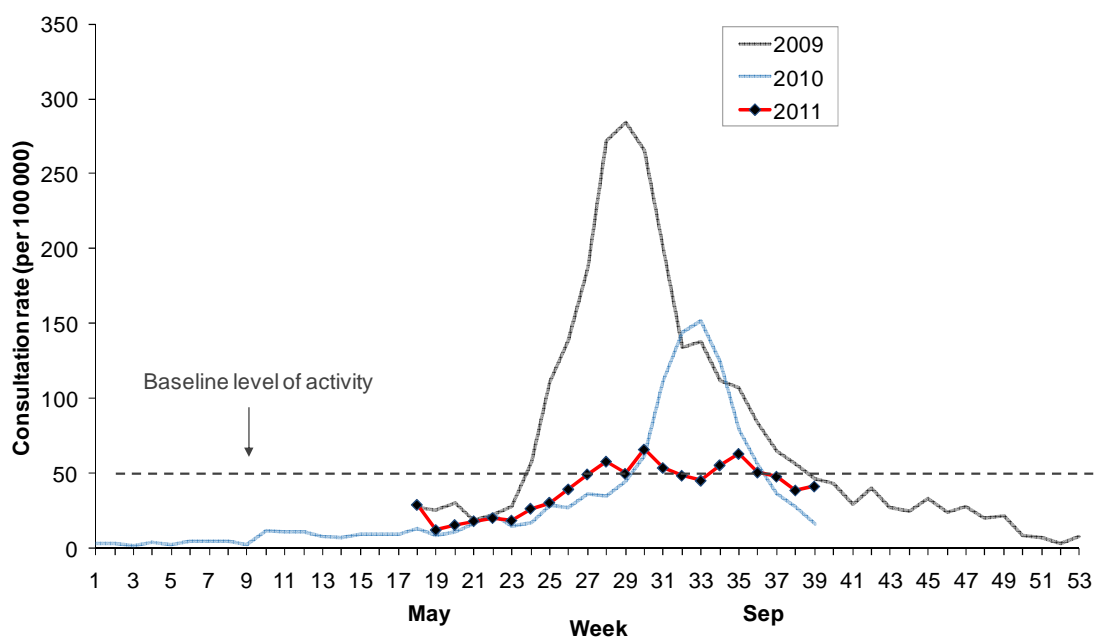
SUMMARY OF THIS REPORT:

Influenza-like illness (ILI) through sentinel surveillance was reported in all 20 District Health Boards (DHB) giving an overall national consultation rate of 41.4 per 100 000 (149 ILI consultations). Two hundred and seventy-three swabs were received from sentinel (23) and non-sentinel surveillance (250). Sixty-three viruses were identified from sentinel (22) and non-sentinel surveillance (41). These were: A (not sub-typed) (26), B (25), A(H3N2) (11) and pandemic A(H1N1) 09 (1).

INFLUENZA-LIKE ILLNESS SURVEILLANCE

In the past week, a total of 149 consultations for influenza-like illness were reported from 78 general practices in all 20 DHBs. This gives a weekly national consultation rate of 41.4 per 100 000 patient population (higher than the consultation rate of 38.7 per 100 000 in week 38). 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. Wairarapa DHB (208.7 per 100 000, 5 cases) had the highest consultation rate, followed by South Canterbury (124.6 per 100 000, 6 cases) and Northland (95.8 per 100 000, 5 cases).

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

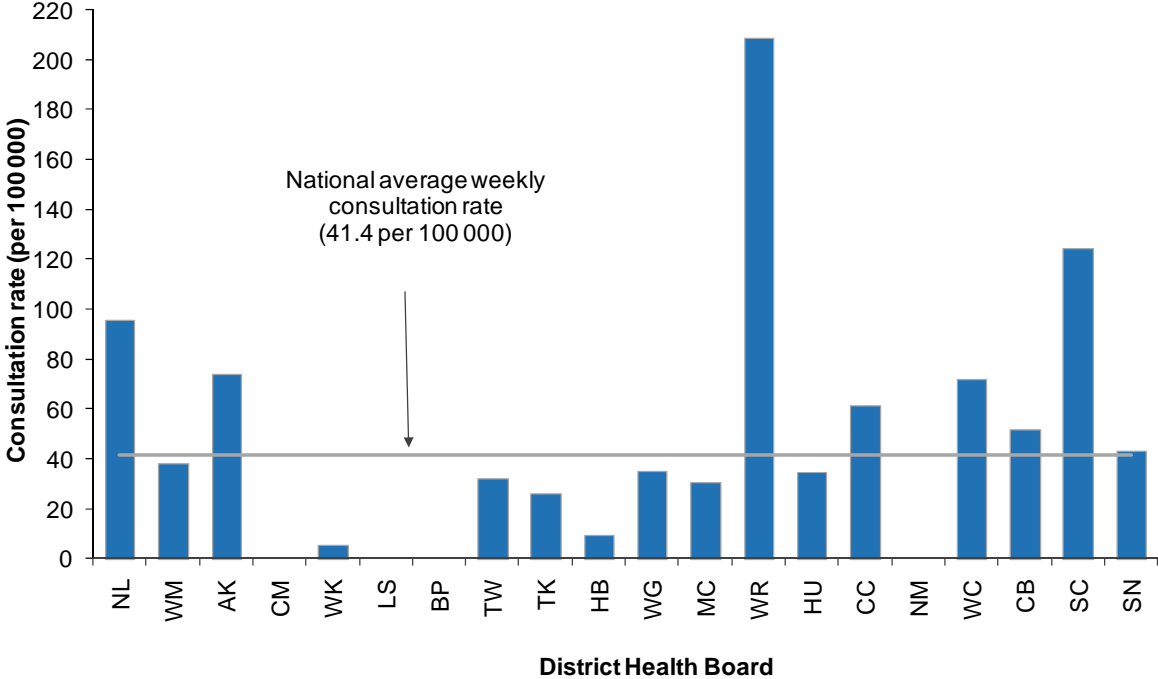
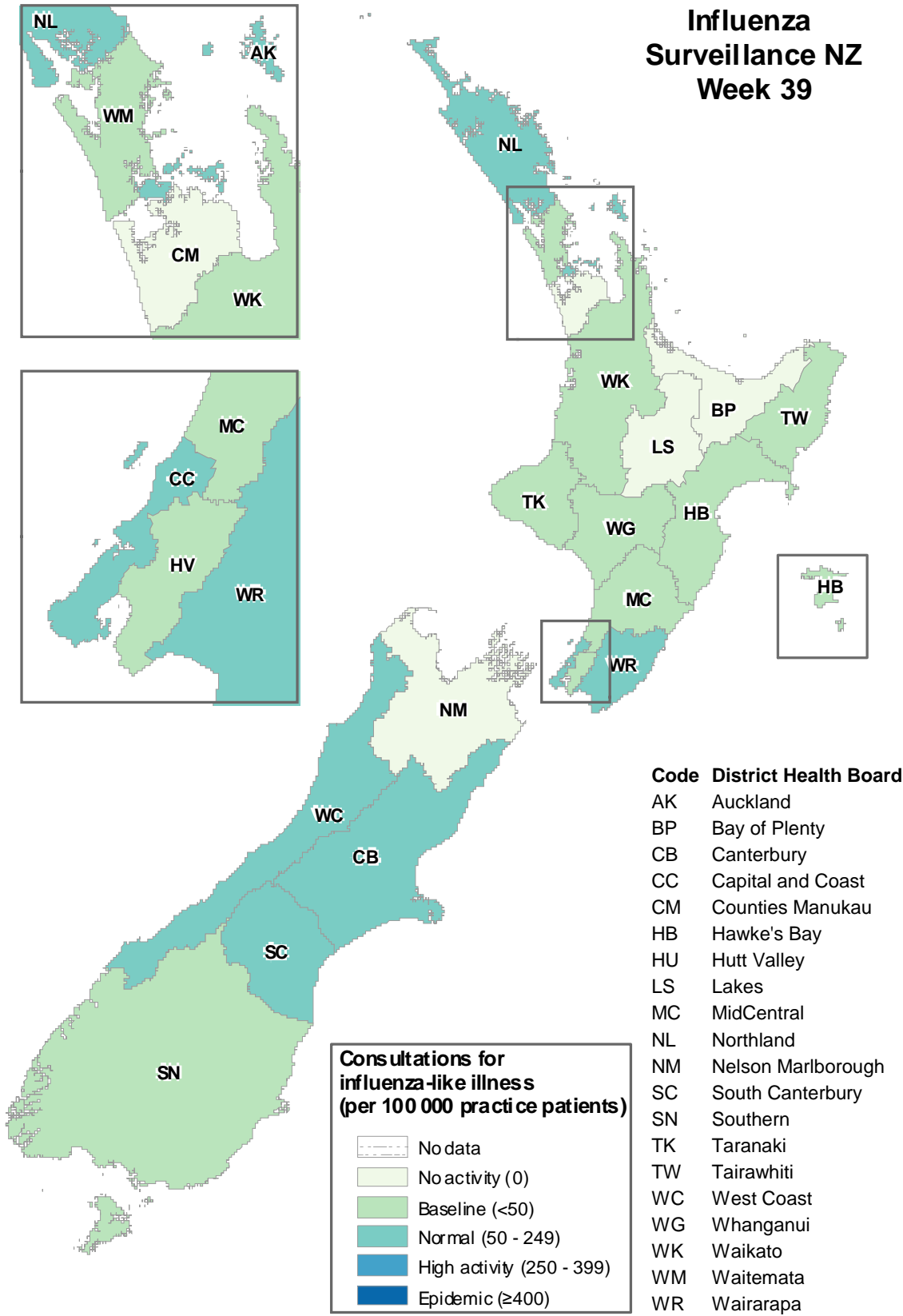


Figure 3 maps the consultation rates for influenza-like illness by DHB.

Figure 3: Consultation rates for influenza-like illness mapped by DHB for week 39, 2011



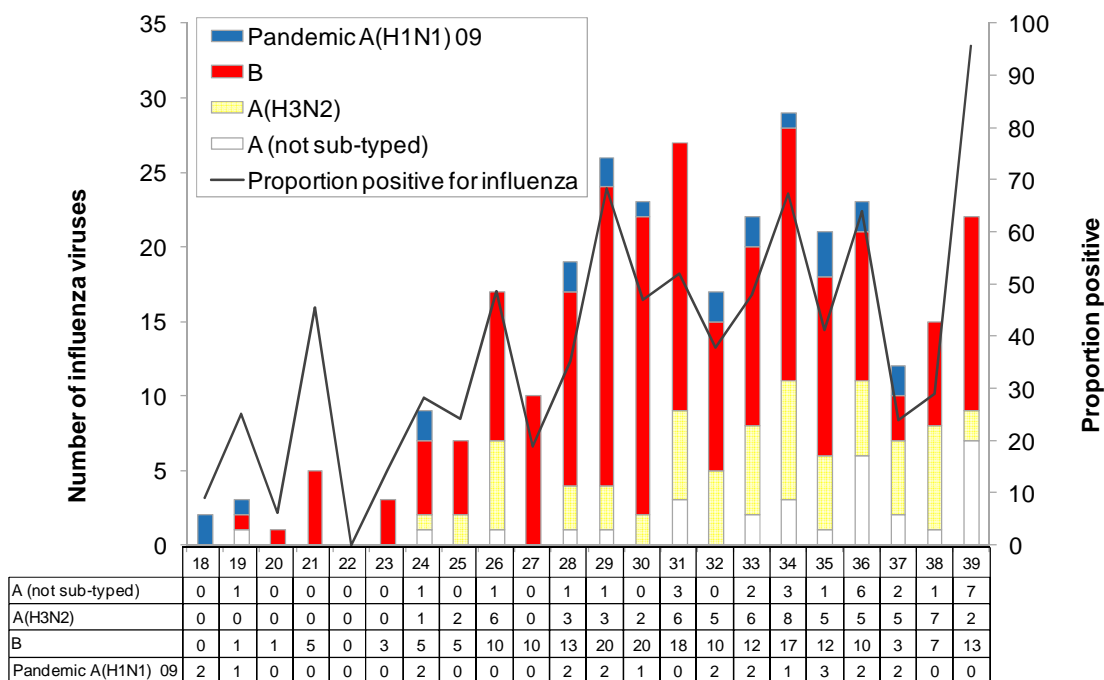
VIROLOGICAL SURVEILLANCE

A total of 23 swabs were received by virology laboratories from sentinel surveillance. Of these, 22 viruses were identified: B (13), A (not sub-typed) (7) and A(H3N2) (2). The distribution by DHB is shown in Table 1.

Table 1: Influenza viruses from sentinel surveillance for week 39 by DHB

Antigenic Strain	AK	BP	WG	MC	NM	WC	CB	SN	Total
A (not sub-typed)	1	3	1	1	0	0	1	0	7
A(H3N2)	0	0	0	0	0	0	2	0	2
B	2	0	0	0	2	1	7	1	13
Total	3	3	1	1	2	1	10	1	22

Figure 4: Total influenza viruses from sentinel surveillance by type and week reported, weeks 18–39 and the total percentage positive from the swabs received



In addition, 250 swabs were received by virology laboratories from non-sentinel surveillance. Of these, 41 viruses were identified: A (not sub-typed) (19), B (12), A(H3N2) (9) and pandemic A(H1N1) 09 (1) (Figure 5). The distribution by DHB is shown in Table 2.

Table 2: Influenza viruses from non-sentinel surveillance for week 39 by DHB

Antigenic Strain	NL	AK	CM	WK	HB	MC	CC	CB	SC	Total
A (not sub-typed)	0	9	5	1	1	1	0	2	0	19
A(H3N2)	1	3	0	1	0	0	2	2	0	9
B	0	0	0	1	3	0	0	7	1	12
Pandemic A(H1N1) 09	0	1	0	0	0	0	0	0	0	1
Total	1	13	5	3	4	1	2	11	1	41

Figure 5: Total influenza viruses from non-sentinel surveillance by type and week reported, weeks 18–39 and the total percentage positive from the swabs received

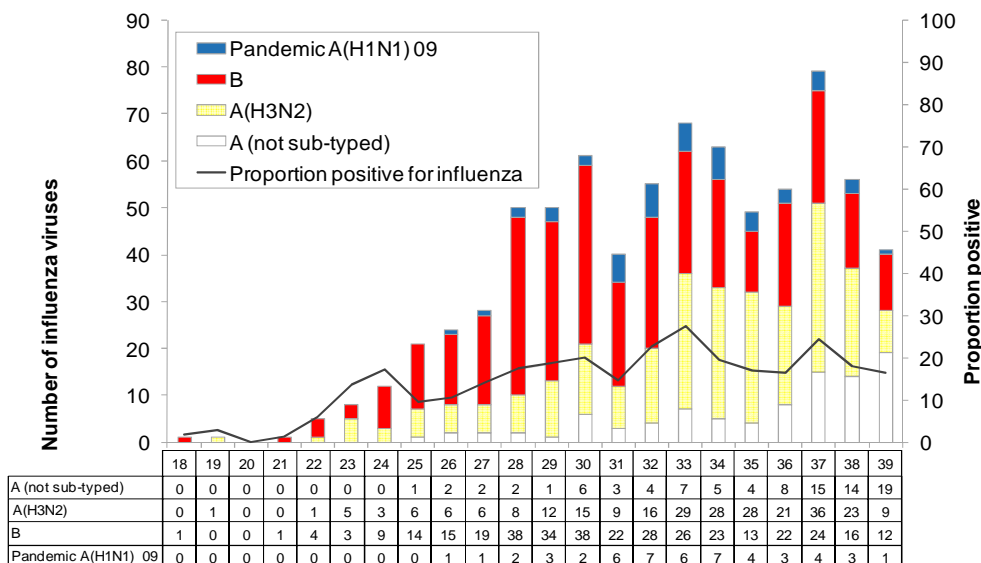


Figure 6 shows the cumulative total of influenza viruses confirmed (sentinel and non-sentinel surveillance) from week 1 to the end of week 39 (2 October 2011). A total of 1118 influenza viruses were identified: influenza B (563) including 252 of B/Brisbane/60/2008 - like viruses and three B/Florida/4/2006 - like virus, pandemic A(H1N1) 09 (93) including 16 A/California/7/2009 (H1N1) - like virus, A (H3N2) (337) including 125 A/Perth/16/2009 (H3N2) - like virus, and A (not sub-typed) (125). 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 39, 2 October 2011

