

INFLUENZA WEEKLY UPDATE

2011/31: 1 – 7 August 2011

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 from sentinel general practice (GP) surveillance and non-sentinel surveillance for week 31 (1 – 7 August 2011).

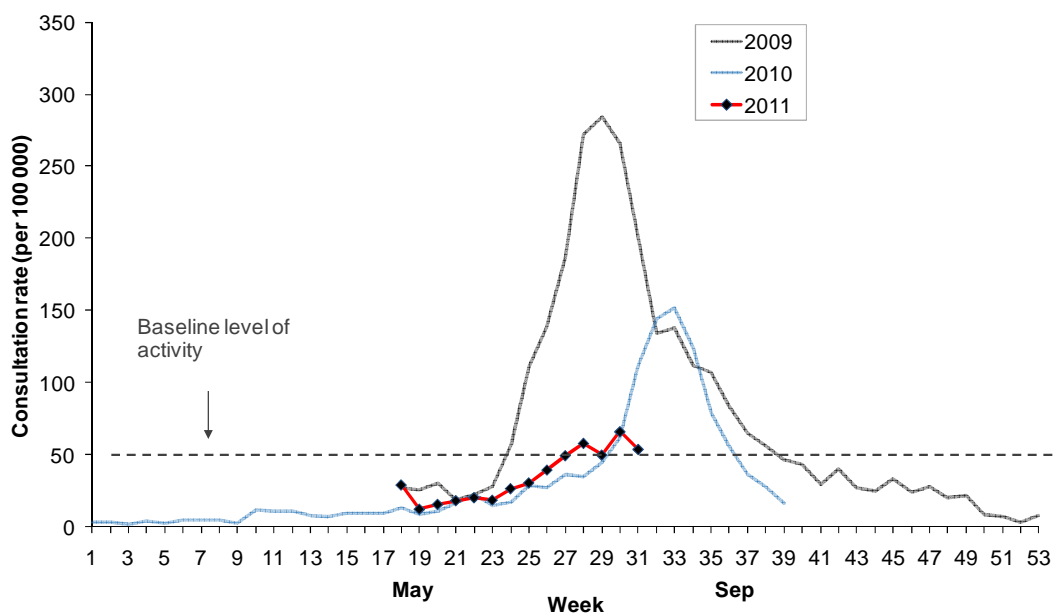
SUMMARY OF THIS REPORT:

Influenza-like illness (ILI) through sentinel surveillance was reported in all 20 District Health Boards (DHB) with a national consultation rate of 53.8 per 100 000 (212 ILI consultations). Three hundred and twenty-five swabs were received from sentinel (52) and non-sentinel surveillance (273). Sixty-six viruses were identified from sentinel (26) and non-sentinel surveillance (40): B (38), A(H3N2) (12), A (not sub-typed) (11) and pandemic A(H1N1) 09 (5).

INFLUENZA-LIKE ILLNESS SURVEILLANCE

In the past week, a total of 212 consultations for influenza-like illness were reported from 87 general practices in all 20 DHBs. This gives a weekly consultation rate of 53.8 per 100 000 patient population. Figure 1 shows the weekly national consultation rates for 2009, 2010 seasons, and 2011 so far. The current rate of influenza-like illness is above the baseline.

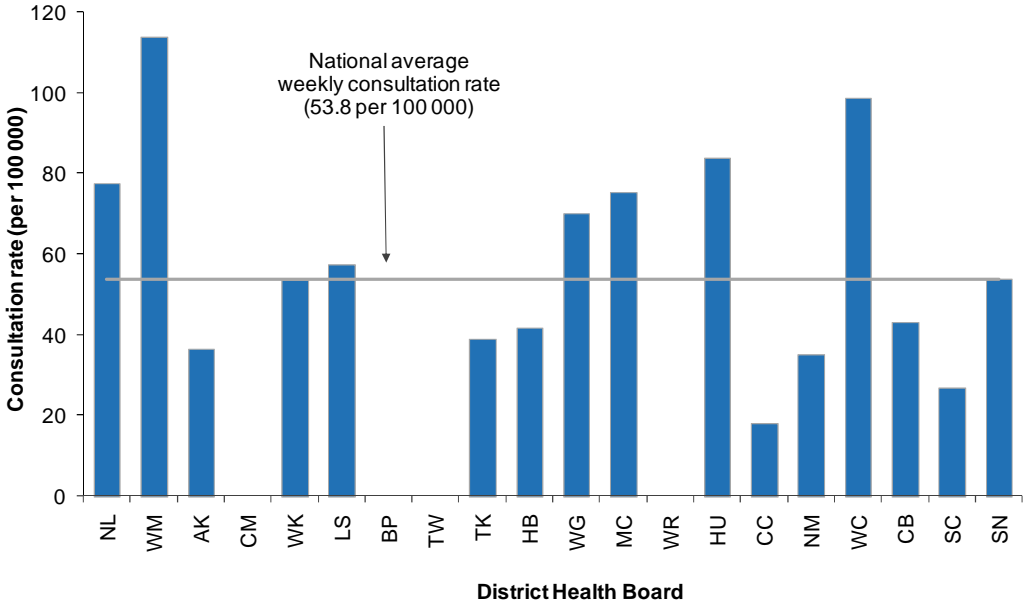
Figure 1: Weekly consultation rates for influenza-like illness in New Zealand, 2009, 2010 and 2011



* 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. Waitemata DHB (113.7 per 100 000, 12 cases) had the highest consultation rate, followed by West Coast (98.6 per 100 000, 17 cases) and Hutt Valley (83.9 per 100 000, 29 cases).

Figure 2: Weekly consultation rates for influenza-like illness by DHB week ending 7 August 2011



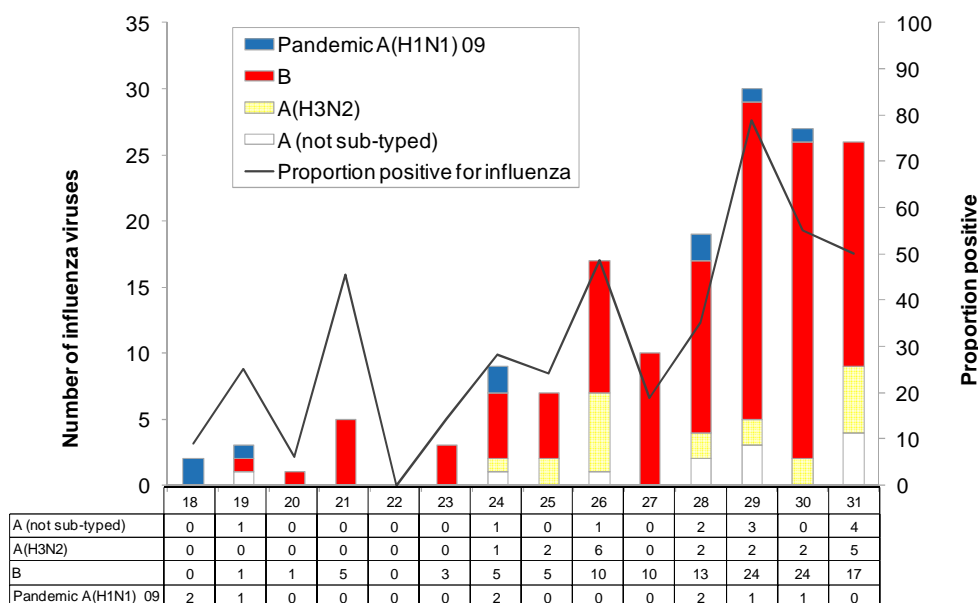
VIROLOGICAL SURVEILLANCE

A total of 52 swabs were received by virology laboratories from sentinel surveillance. Of these, 26 viruses were identified: B (17), A(H3N2) (5) and A (not sub-typed) (4). The distribution by DHB is shown in Table 1.

Table 1: Influenza viruses from sentinel surveillance for week 31 by DHB

Antigenic Strain	AK	WK	TK	HB	MC	CC	NM	CB	SC	SN	Total
A (not sub-typed)	2	0	0	0	1	0	1	0	0	0	4
A(H3N2)	0	0	0	2	1	1	0	0	1	0	5
B	2	2	1	1	4	0	1	3	0	3	17
Total	4	2	1	3	6	1	2	3	1	3	26

Figure 4: Total influenza viruses from sentinel surveillance by type and week reported, weeks 18–31 and the total percentage positive from the swabs received



In addition, 273 swabs were received by virology laboratories from non-sentinel surveillance. Of these, 40 viruses were identified: B (21), A(H3N2) (7), A (not sub-typed) (7) and pandemic A(H1N1) 09 (5) (Figure 5). The distribution by DHB is shown in Table 2.

Table 2: Influenza viruses from non-sentinel surveillance for week 31 by DHB

Antigenic Strain	WM	AK	CM	WK	MC	CC	WC	CB	SN	Total
A (not sub-typed)	0	2	4	0	0	0	0	1	0	7
A(H3N2)	0	0	2	0	1	2	0	1	1	7
B	1	2	3	6	0	3	1	4	1	21
Pandemic A(H1N1) 09	0	1	2	0	0	0	0	2	0	5
Total	1	5	11	6	1	5	1	8	2	40

Figure 5: Total influenza viruses from non-sentinel surveillance by type and week reported, weeks 18–31 and the total percentage positive from the swabs received

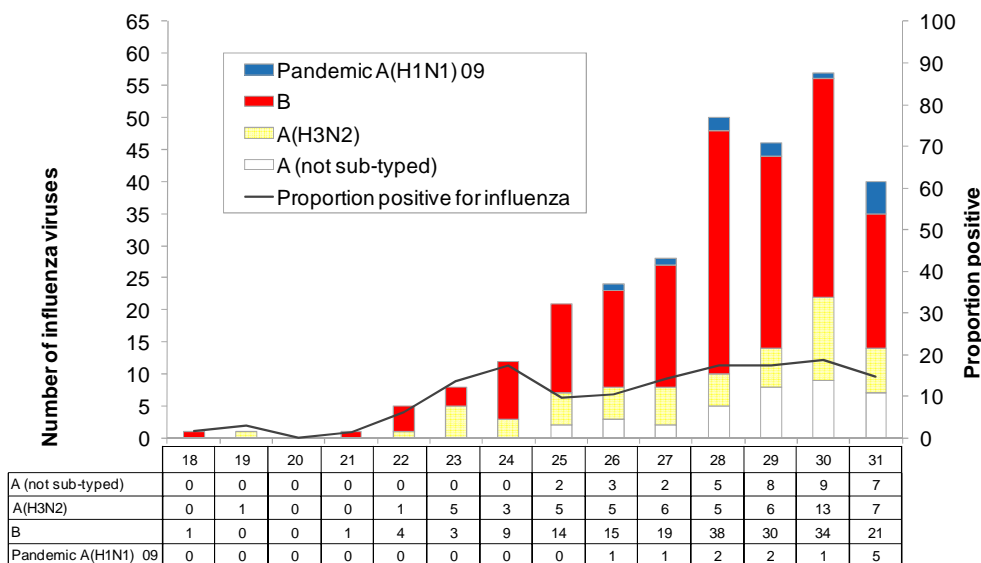


Figure 6 shows the cumulative total of influenza viruses confirmed (sentinel and non-sentinel surveillance) from week 1 to the end of week 31 (7 August 2011). A total of 491 influenza viruses were identified: influenza B (313) including 102 of B/Brisbane/60/2008 - like viruses and one B/Florida/4/2006 - like virus, pandemic (H1N1) 09 (42) including four A/California/7/2009 (H1N1) - like virus, A (H3N2) (84) including 21 A/Perth/16/2009 (H3N2) - like virus, and A (not sub-typed) (52). 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 2011 influenza vaccine.

Figure 6: Cumulative laboratory-confirmed viruses by DHB from week 1 to week 31, 7 August 2011

