

# INFLUENZA WEEKLY UPDATE

2011/36: 5 – 12 September 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 36 (5 – 12 September 2011).

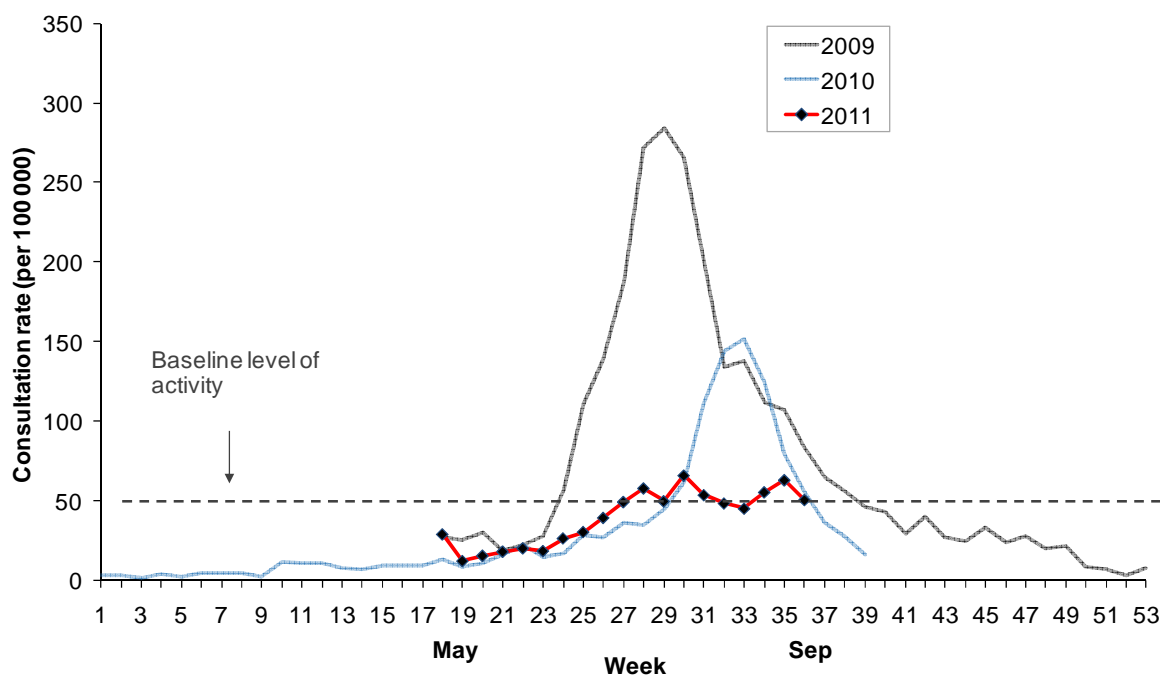
## SUMMARY OF THIS REPORT:

Influenza-like illness (ILI) through sentinel surveillance was reported in all 20 District Health Boards (DHB) with a national consultation rate of 50.7 per 100 000 (197 ILI consultations). Three hundred and sixty-four swabs were received from sentinel (36) and non-sentinel surveillance (328). Seventy-seven viruses were identified from sentinel (24) and non-sentinel surveillance (53): B (32), A (not sub-typed) (19), A(H3N2) (19) and pandemic A(H1N1) 09 (5).

## INFLUENZA-LIKE ILLNESS SURVEILLANCE

In the past week, a total of 197 consultations for influenza-like illness were reported from 82 general practices in all 20 DHBs. This gives a weekly consultation rate of 50.7 per 100 000 patient population (lower than the consultation rate of 63.2 per 100 000 in week 35). 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. South Canterbury DHB (161.8 per 100 000, 12 cases) had the highest consultation rate, followed by Tairāwhiti (161.5 per 100 000, 5 cases) and Whanganui (151.8 per 100 000, 13 cases).

**Figure 2: Weekly consultation rates for influenza-like illness by DHB week ending 12 September 2011**

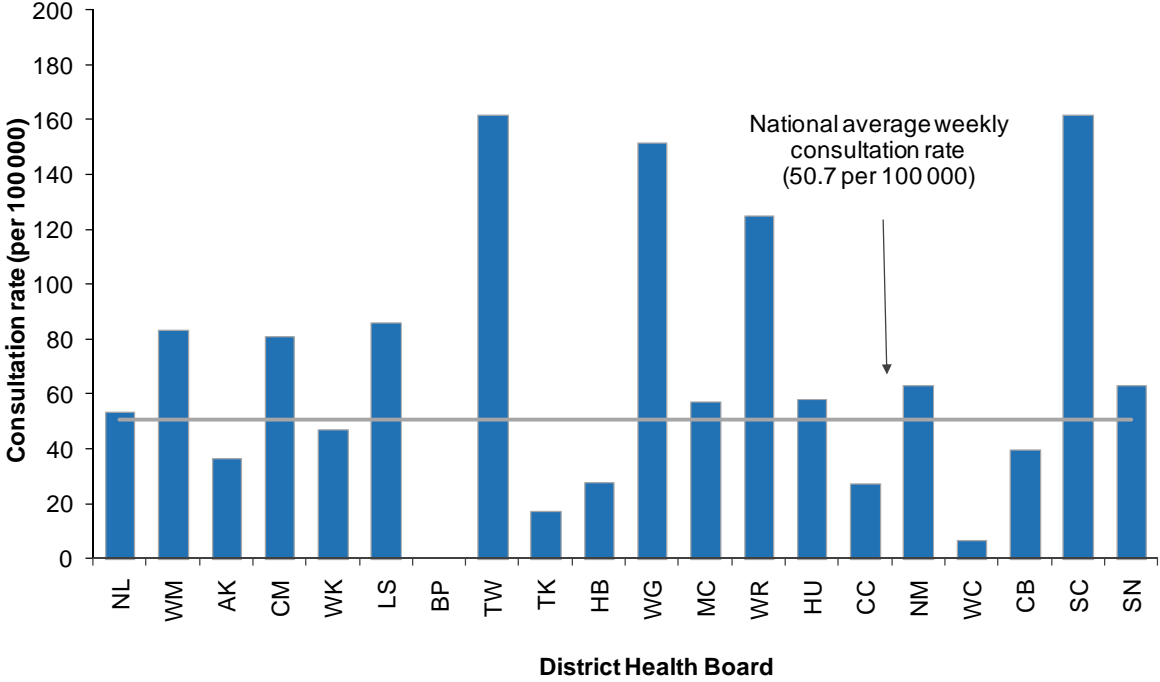
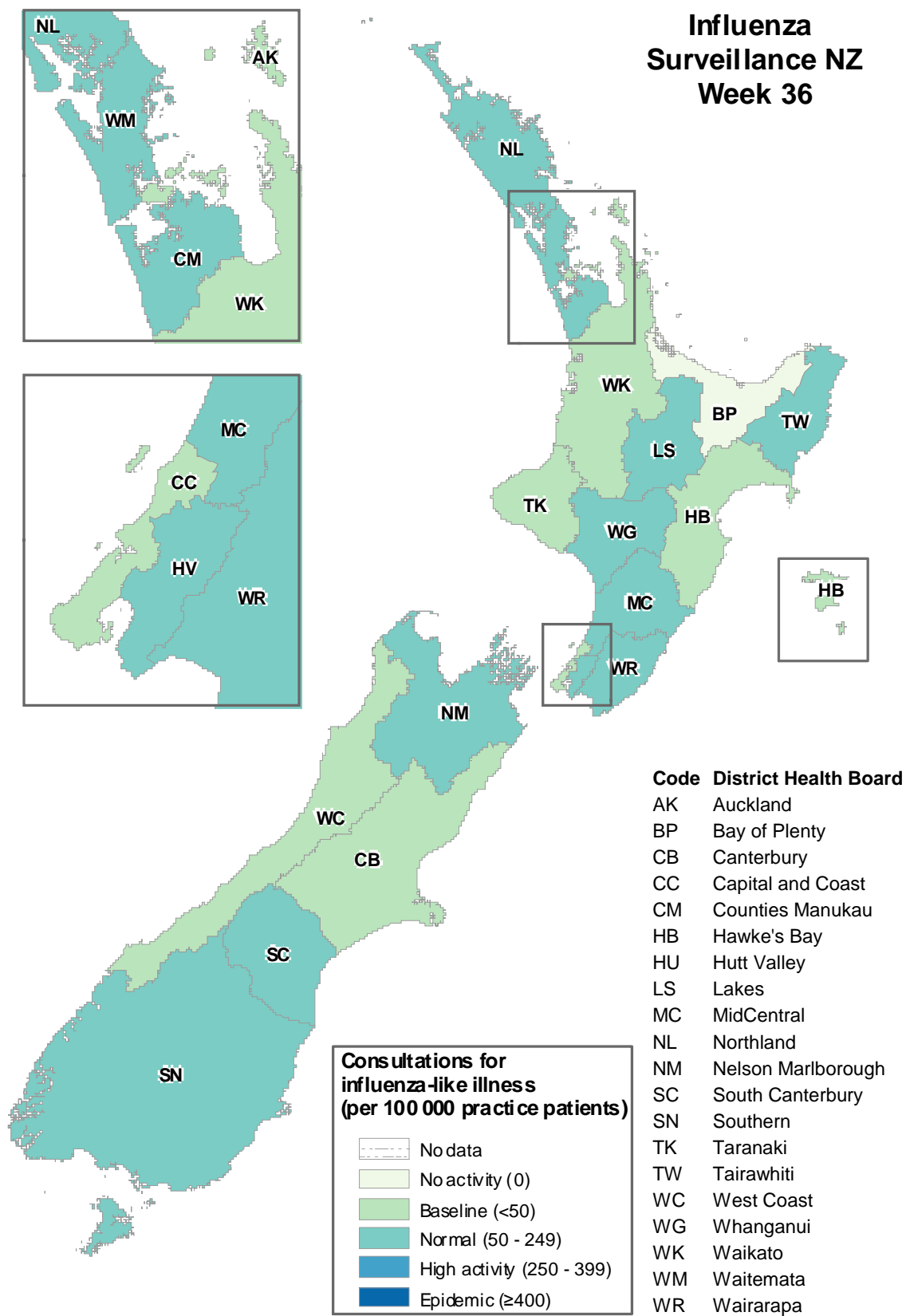


Figure 3 maps the consultation rates for influenza-like illness by DHB.

**Figure 3: Consultation rates for influenza-like illness mapped by DHB for week 36, 2011**



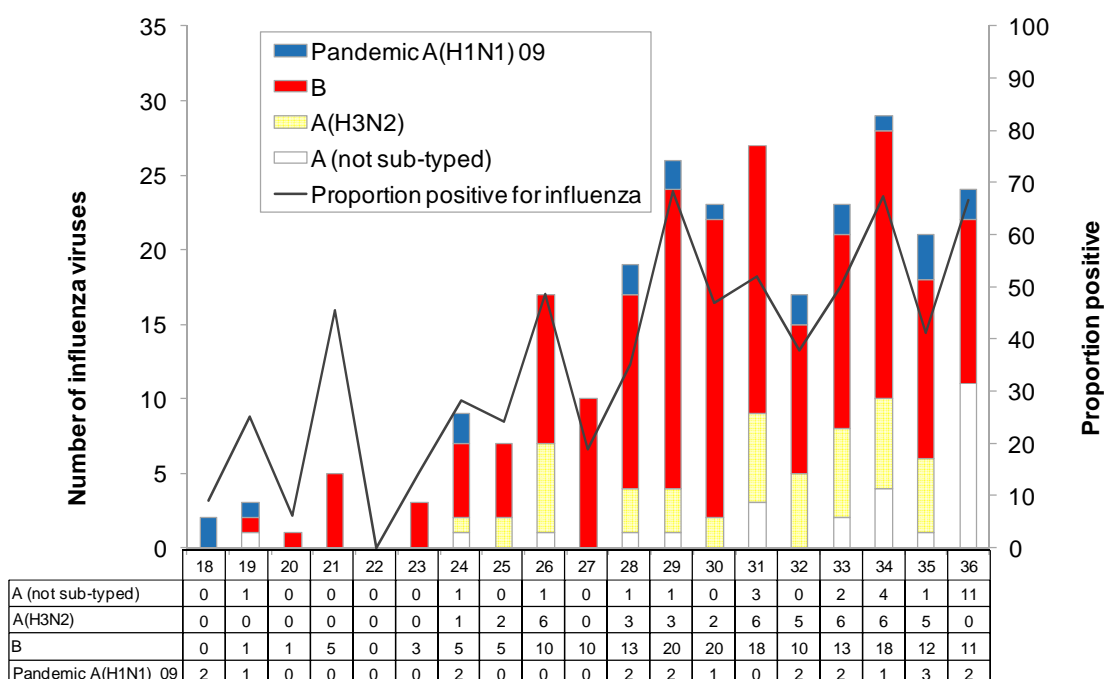
## VIROLOGICAL SURVEILLANCE

A total of 36 swabs were received by virology laboratories from sentinel surveillance. Of these, 24 viruses were identified: B (11), A (not sub-typed) (11) and pandemic A(H1N1) 09 (2). The distribution by DHB is shown in Table 1.

**Table 1: Influenza viruses from sentinel surveillance for week 36 by DHB**

Antigenic Strain	AK	WK	TW	TK	WG	MC	CC	CB	SC	SN	Total
A (not sub-typed)	2	0	1	1	1	3	2	0	0	1	11
B	0	1	0	0	1	1	1	4	1	2	11
Pandemic A(H1N1) 09	0	0	0	0	0	0	0	2	0	0	2
<b>Total</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>4</b>	<b>3</b>	<b>6</b>	<b>1</b>	<b>3</b>	<b>24</b>

**Figure 4: Total influenza viruses from sentinel surveillance by type and week reported, weeks 18–36 and the total percentage positive from the swabs received**



In addition, 328 swabs were received by virology laboratories from non-sentinel surveillance. Of these, 53 viruses were identified: A(H3N2) (21), B (21), A (not sub-typed) (8) and pandemic A(H1N1) 09 (3) (Figure 5). The distribution by DHB is shown in Table 2.

**Table 2: Influenza viruses from non-sentinel surveillance for week 36 by DHB**

Antigenic Strain	WM	AK	CM	WK	LS	MC	CC	WC	CB	SN	Total
A (not sub-typed)	0	3	1	1	0	1	0	0	1	1	8
A(H3N2)	1	2	8	0	0	1	1	0	8	0	21
B	1	1	0	6	1	0	2	2	8	0	21
Pandemic A(H1N1) 09	0	0	1	0	0	0	0	0	1	1	3
<b>Grand Total</b>	<b>2</b>	<b>6</b>	<b>10</b>	<b>7</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>18</b>	<b>2</b>	<b>53</b>

**Figure 5: Total influenza viruses from non-sentinel surveillance by type and week reported, weeks 18–36 and the total percentage positive from the swabs received**

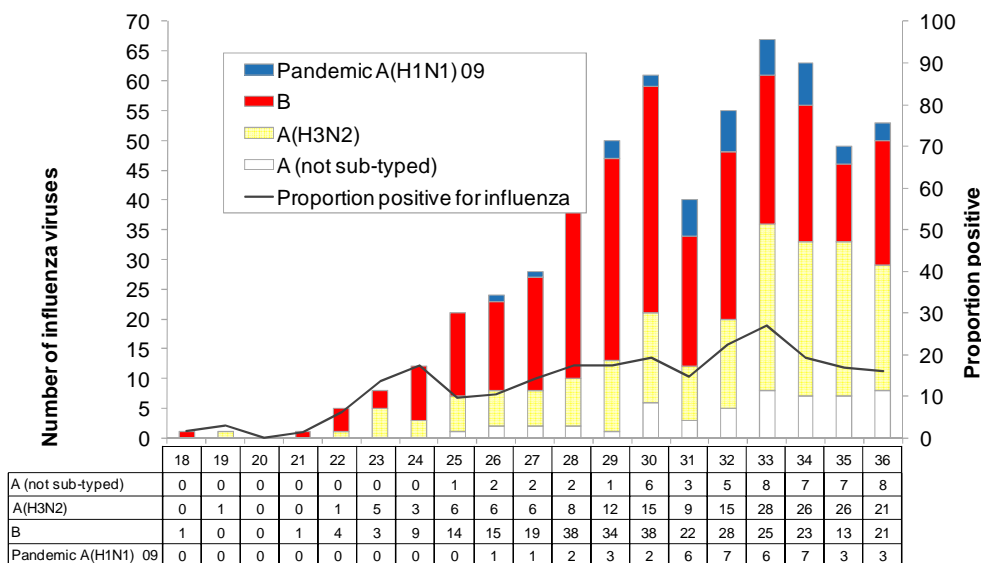


Figure 6 shows the cumulative total of influenza viruses confirmed (sentinel and non-sentinel surveillance) from week 1 to the end of week 36 (12 September 2011). A total of 893 influenza viruses were identified: influenza B (489) including 227 of B/Brisbane/60/2008 - like viruses and three B/Florida/4/2006 - like virus, pandemic (H1N1) 09 (82) including 15 A/California/7/2009 (H1N1) - like virus, A (H3N2) (242) including 85 A/Perth/16/2009 (H3N2) - like virus, and A (not sub-typed) (80). 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 36, 12 September 2011**

