

INFLUENZA WEEKLY UPDATE

2010/35: 30 August – 5 September 2010

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 (laboratory-based) for week 35 (30 August – 5 September 2010).

REPORT SUMMARY

- Influenza-like illness through sentinel surveillance was reported from 19 out of 20¹ District Health Boards (DHB) with a national consultation rate of 75.4 per 100 000 (257 ILI consultations).
- A total of 996 swabs were received from sentinel (117) and non-sentinel surveillance (879). Of these, 138 influenza viruses have been reported through sentinel (20, 14%) and non-sentinel surveillance (118, 86%). The majority of the viruses were pandemic (H1N1) 09 (119, 86%).
- Since January 2010, 1658² cases of pandemic (H1N1) 09 have been recorded in EpiSurv³, 141 of which were reported in week 35.

In the past week, a total of 257 consultations for influenza-like illness were reported from 79 general practices in 19 out of 20 DHBs. This gives a weekly consultation rate of 75.4 per 100 000 patient population. Figure 1 shows the weekly national consultation rates for 2008, 2009 seasons, and 2010 season to date. The current rate of influenza-like illness is above the baseline.

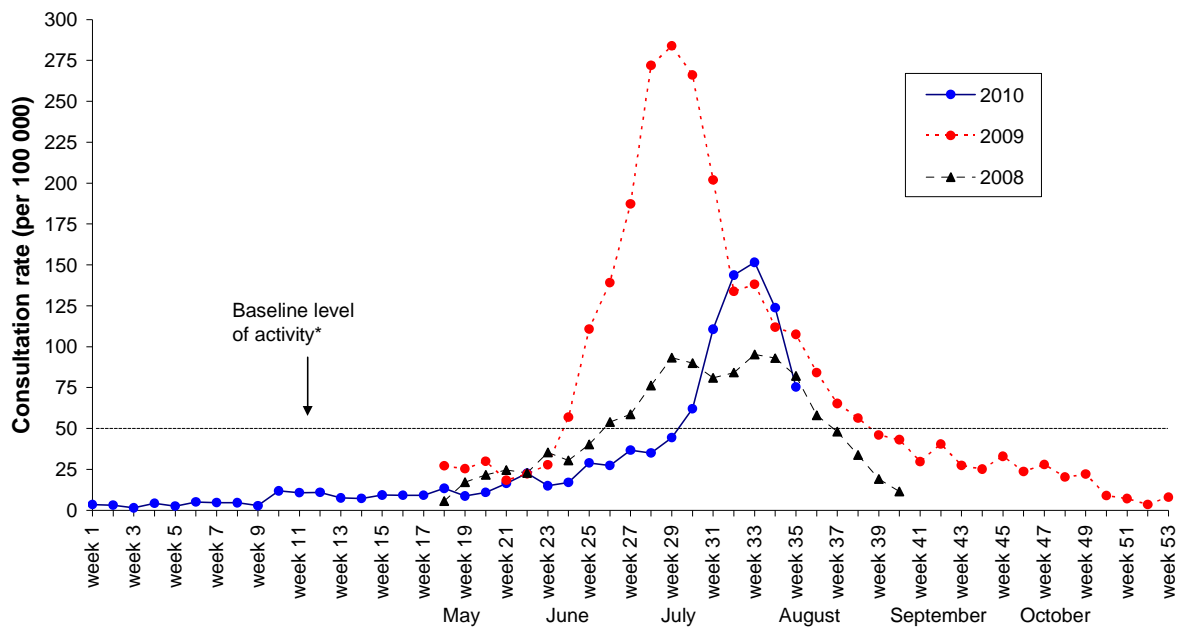
Figure 2 compares the consultation rates for influenza-like illness for each DHB over the past week. Lakes DHB had the highest consultation rate (170.3 per 100 000, 6 cases), followed by Canterbury (149.6 per 100 000, 49 cases) and Hutt Valley (121.6 per 100 000, 42 cases) DHBs.

¹ Otago and Southland DHBs now combined as Southern DHB.

² Includes confirmed (1591), probable (24), and under investigation (43) cases.

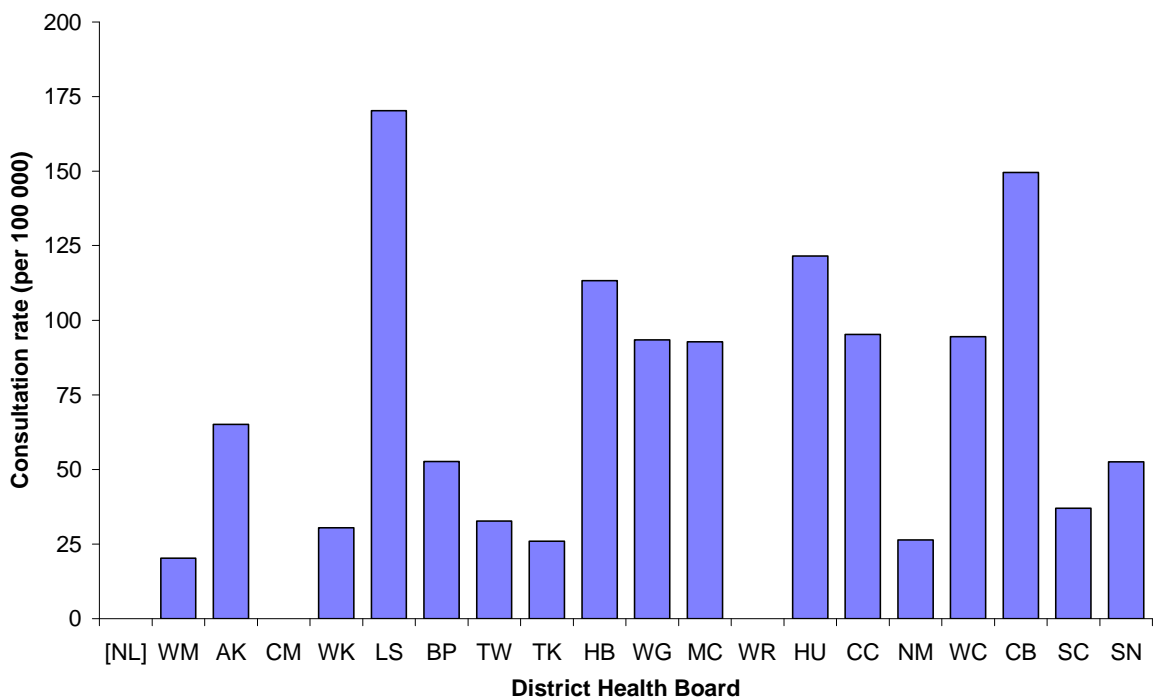
³ Data source: EpiSurv as of 8 September 2010.

Figure 1: Weekly consultation rates for influenza-like illness in New Zealand, 2008, 2009 and 2010



*A weekly rate <50 influenza-like illness 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 influenza-like illness consultations per 100 000 patient population indicates an epidemic level of influenza activity.

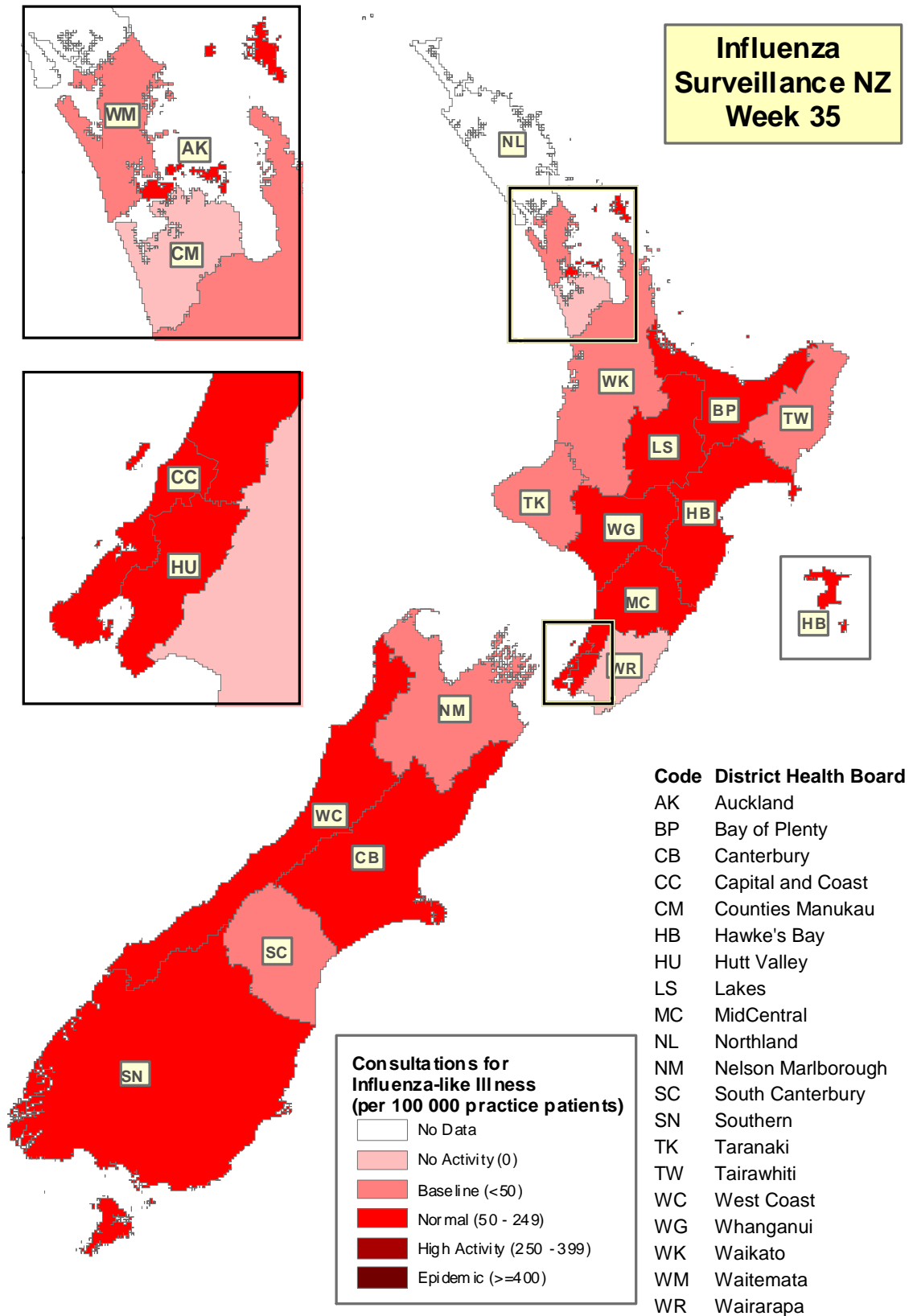
Figure 2: Weekly consultation rates for influenza-like illness by DHB for the week ending 5 September 2010



[] No data 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 35, 2010



A total of 117 swabs were received by virology laboratories from sentinel surveillance. Of these, 20 influenza viruses were identified: pandemic (H1N1) 09 (17) and A (not sub-typed) (3). The distribution by DHB is shown in Table 1.

Table 1: Influenza viruses from sentinel surveillance for week 35 by DHB

Antigenic Strain	AK*	CB	Total
A (not sub-typed)	1	2	3
Pandemic (H1N1) 09	0	17	17
Total	1	19	20

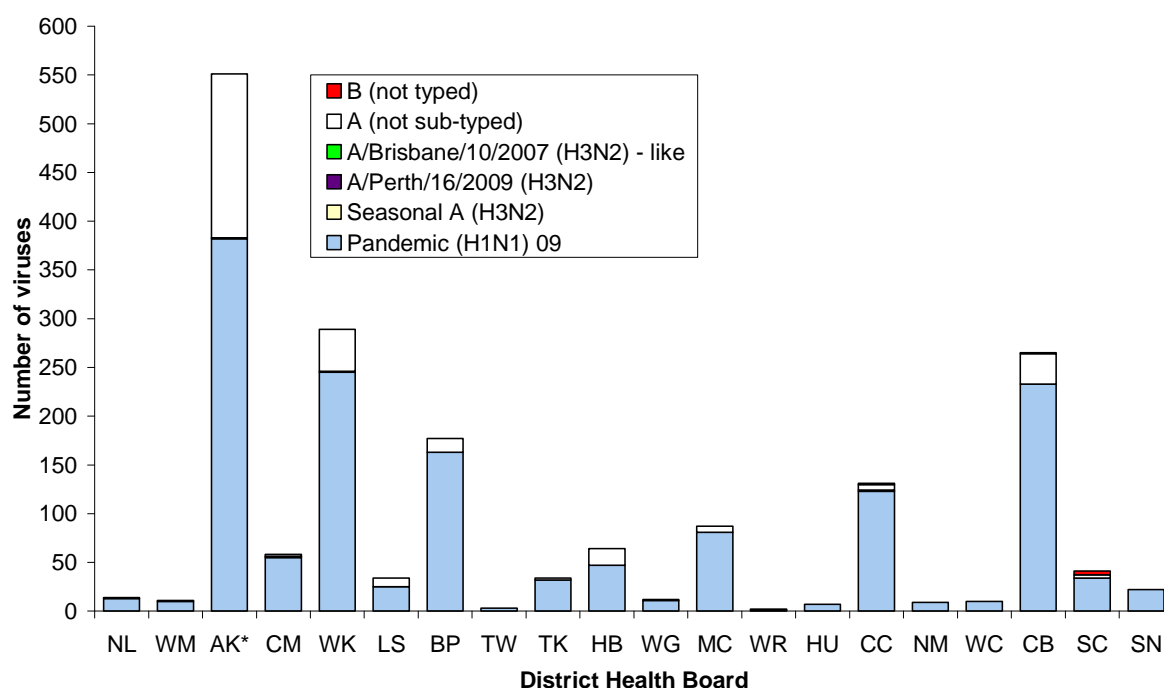
In addition, 879 swabs were received by virology laboratories from non-sentinel surveillance. Of these, 118 influenza viruses were identified: pandemic (H1N1) 09 (102) and A (not sub-typed) (16). The distribution by DHB is shown in Table 2.

Table 2: Influenza viruses from non-sentinel surveillance for week 35 by DHB

Antigenic Strain	NL	AK*	CM	WK	LS	BP	TK	HB	WG	MC	CC	NM	WC	CB	SC	SN	Total
A (not sub-typed)	1	0	0	8	2	1	0	3	0	1	0	0	0	0	0	0	16
Pandemic (H1N1) 09	1	15	12	8	2	10	4	5	1	6	18	1	1	16	1	1	102
Total	2	15	12	16	4	11	4	8	1	7	18	1	1	16	1	1	118

Figure 4 shows the cumulative total of influenza viruses confirmed (sentinel and non-sentinel surveillance) from week 1 to the end of week 35 (5 September 2010). A total of 1821 influenza viruses were identified: pandemic (H1N1) 09 (1506), A (not sub-typed) (305), B (not typed) (6), seasonal A (H3N2) (2), A/Perth/16/2009⁴ (H3N2) (1) and A/Brisbane/10/2007 (H3N2) – like (1).

Figure 4: Cumulative laboratory-confirmed viruses by DHB from week 1 to week 35, 5 September 2010



*Note: Viruses from Auckland without DHB codes have been temporarily assigned to Auckland (AK).

⁴ A/Perth/16/2009 (H3N2) virus is included in 2010 vaccine formulation.

The temporal distribution of influenza viruses is shown in the graphs below (Figures 5 and 6) for sentinel and non-surveillance from week 18 (3–9 May 2010) to week 35 (30 August – 5 September 2010). The number of pandemic (H1N1) 09 viruses is greater than the number of seasonal influenza viruses.

Figure 5: Total influenza viruses from sentinel surveillance by type and week reported, week 18–35 and the total percentage positive from the swabs received

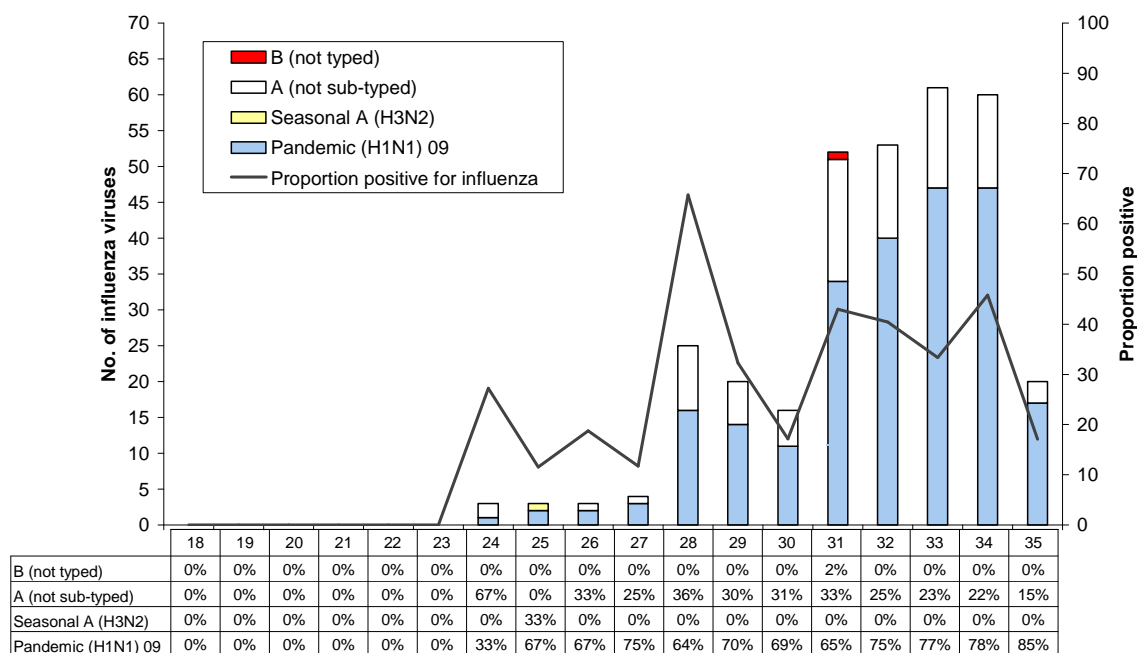


Figure 6: Total influenza viruses from non-sentinel surveillance by type and week reported, week 18–35 and the total percentage positive from the swabs received

