

INFLUENZA WEEKLY UPDATE

2010/34: 23–29 August 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 34 (23–29 August 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 123.8 per 100 000 (419 ILI consultations).
- A total of 1243 swabs were received from sentinel (131) and non-sentinel surveillance (1112). Of these, 212 influenza viruses have been reported through sentinel (51, 24%) and non-sentinel surveillance (161, 76%). The majority of the viruses were pandemic (H1N1) 09 (177, 83%).
- Since January 2010, 1518² cases of pandemic (H1N1) 09 have been recorded in EpiSurv³, 285 of which were reported in week 34.

In the past week, a total of 419 consultations for influenza-like illness were reported from 80 general practices in 19 out of 20 DHBs. This gives a weekly consultation rate of 123.8 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.

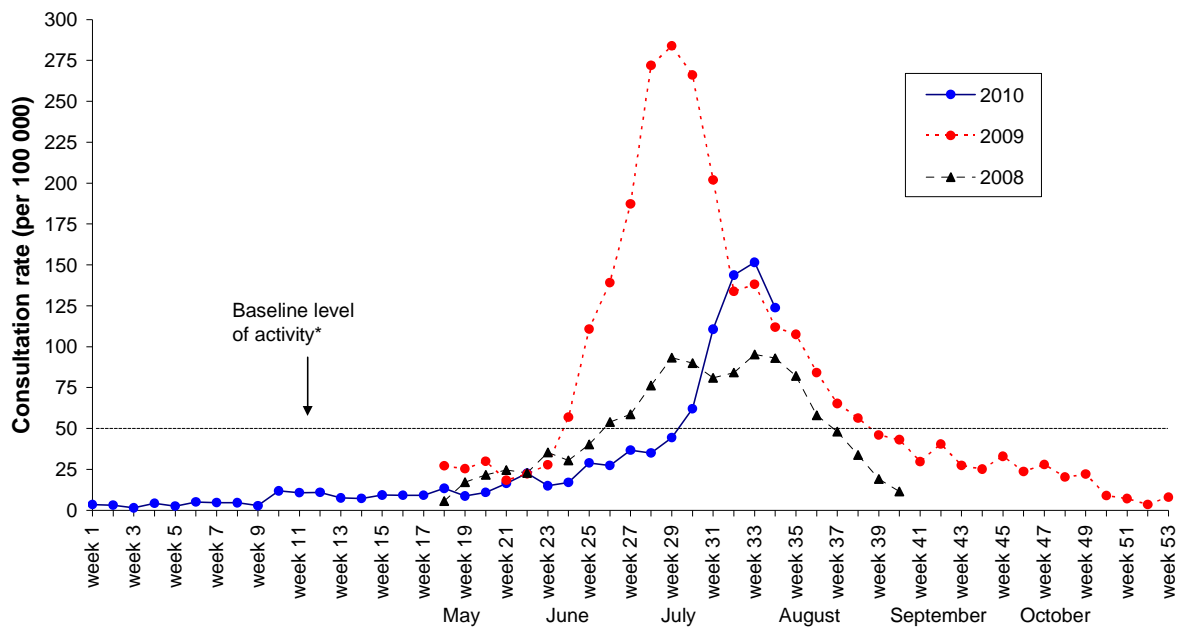
Figure 2 compares the consultation rates for influenza-like illness for each DHB over the past week. Hutt Valley DHB had the highest consultation rate (292.3 per 100 000, 101 cases), followed by Hawke's Bay (251.2 per 100 000, 51 cases) and Canterbury (203.3 per 100 000, 69 cases) DHBs.

¹ Otago and Southland DHBs now combined as Southern DHB.

² Includes confirmed (1454), probable (24), and under investigation (40) cases.

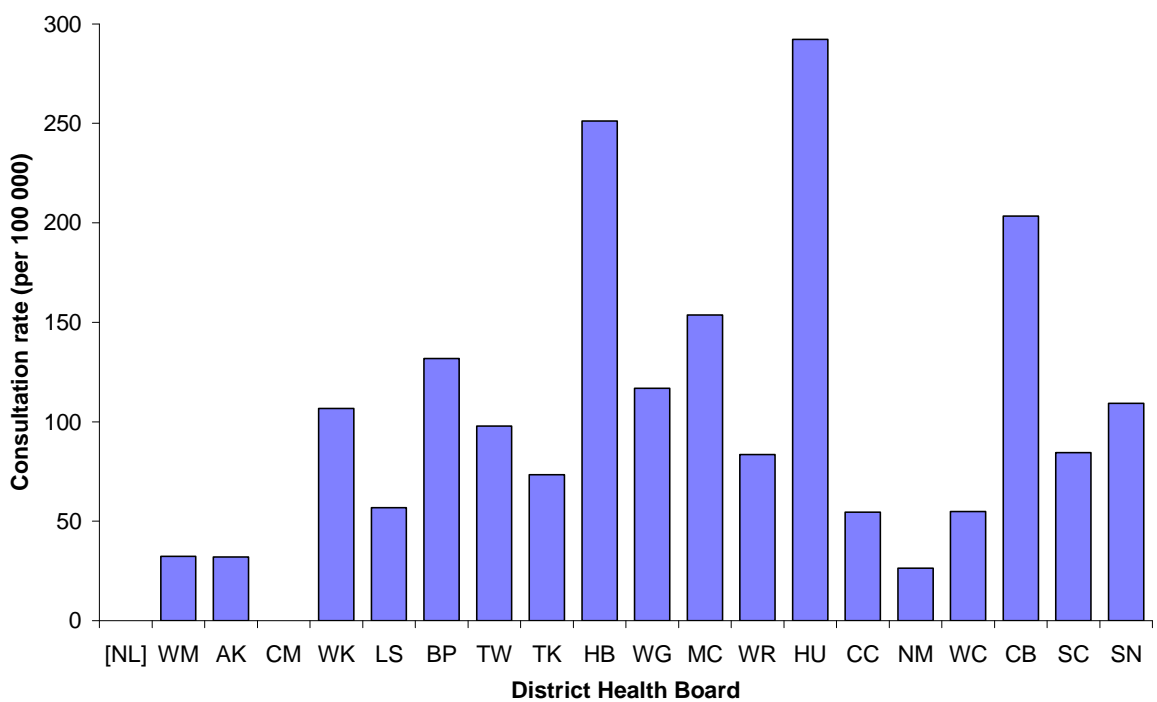
³ Data source: EpiSurv as of 2 September 2010.

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



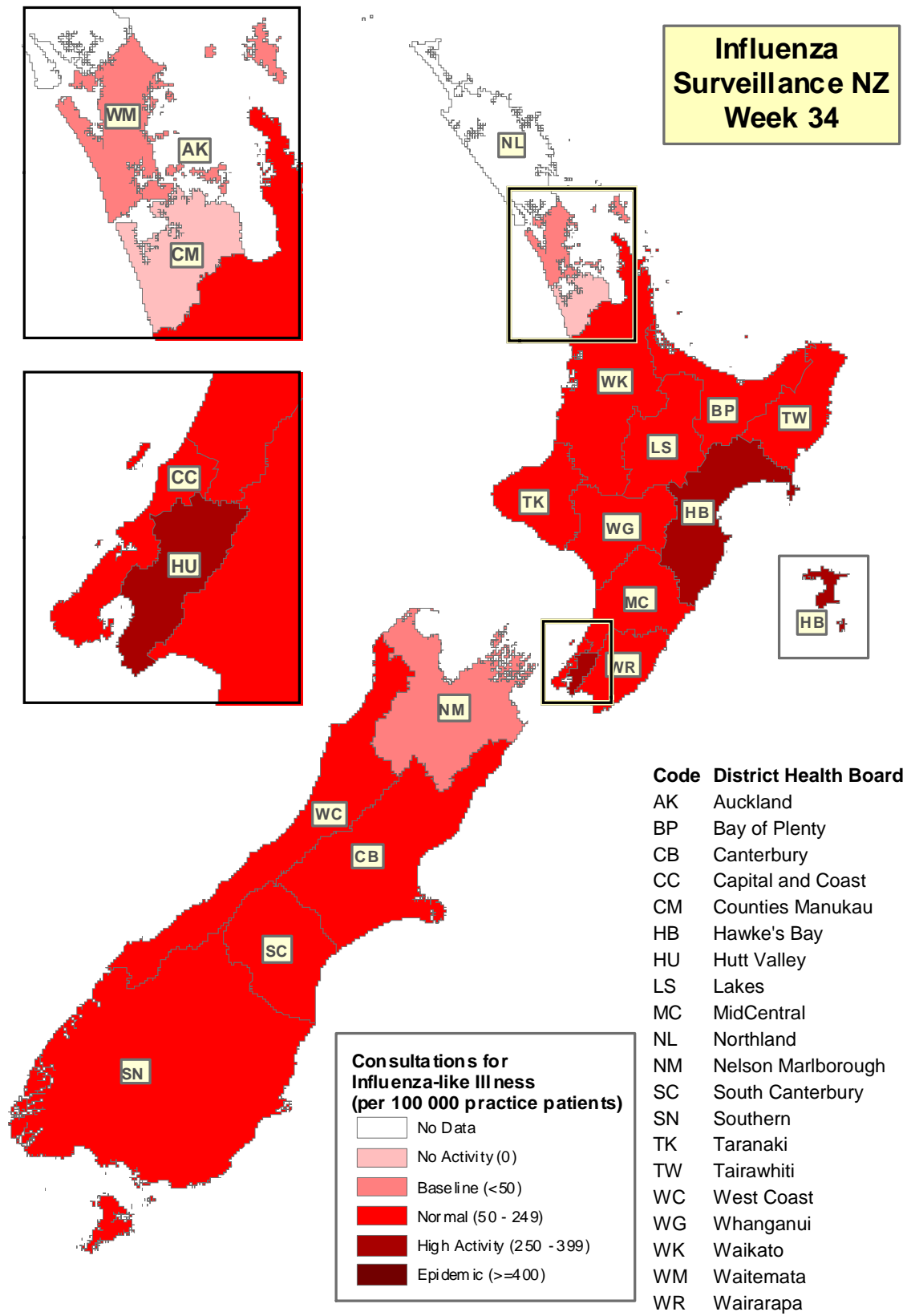
*A weekly rate <50 influenza-like illness consultations per 100 000 patient population is considered baseline activity. A rate of 50–249 is considered indicative of normal seasonal influenza activity, and a rate of 250–399 indicative of higher than expected influenza activity. A rate >400 influenza-like 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 29 August 2010



[] No data for the week.

Figure 3: Consultation rates for influenza-like illness mapped by DHB for week 34, 2010



A total of 131 swabs were received by virology laboratories from sentinel surveillance. Of these, 51 influenza viruses were identified: pandemic (H1N1) 09 (38) and A (not sub-typed) (13). The distribution by DHB is shown in Table 1.

Table 1: Influenza viruses from sentinel surveillance for week 34 by DHB

Antigenic Strain	AK*	WK	BP	TW	TK	HB	WG	WR	CC	CB	SC	SN	Total
A (not sub-typed)	8	3	1	0	0	0	0	1	0	0	0	0	13
Pandemic (H1N1) 09	0	0	1	2	4	4	2	1	3	16	1	4	38
Total	8	3	2	2	4	4	2	2	3	16	1	4	51

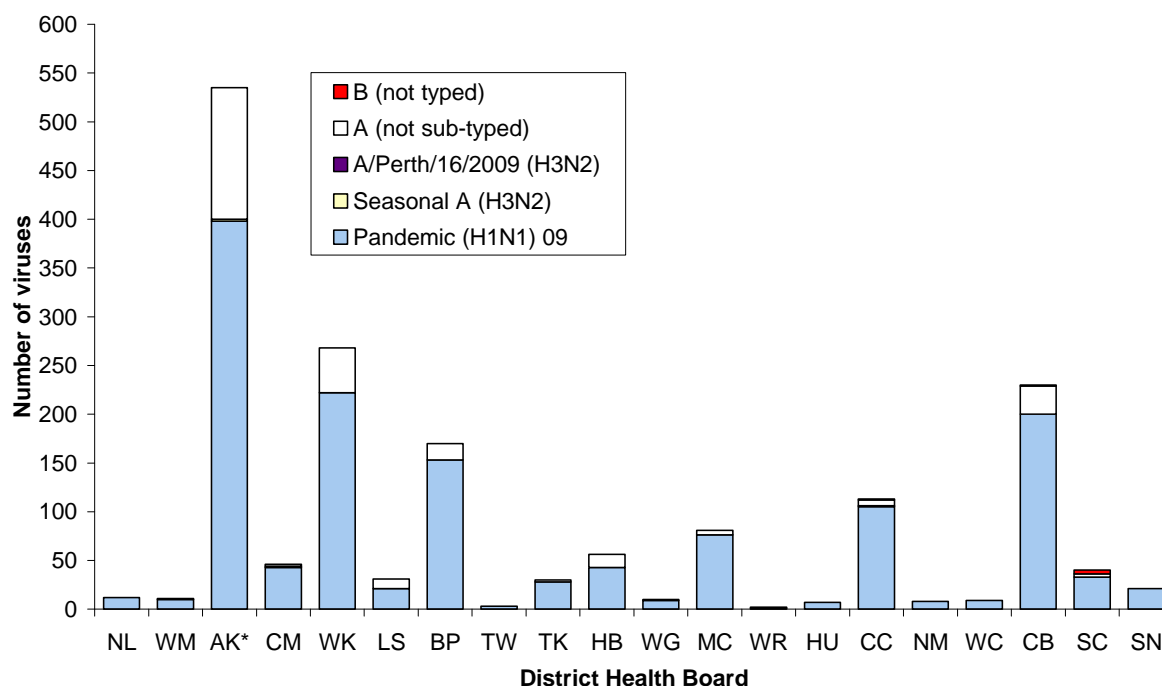
In addition, 1112 swabs were received by virology laboratories from non-sentinel surveillance. Of these, 161 influenza viruses were identified: pandemic (H1N1) 09 (139), A (not sub-typed) (21) and seasonal A (H3N2) (1). The distribution by DHB is shown in Table 2.

Table 2: Influenza viruses from non-sentinel surveillance for week 34 by DHB

Antigenic Strain	NL	AK*	CM	WK	LS	BP	TK	HB	WG	MC	HU	CC	NM	WC	CB	SN	Total
A (not sub-typed)	0	5	0	4	3	3	0	3	0	1	0	0	0	0	2	0	21
Pandemic (H1N1) 09	1	29	19	11	3	15	2	6	2	10	4	12	1	3	19	2	139
Seasonal A (H3N2)	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Total	1	34	19	15	6	18	2	9	2	11	4	13	1	3	21	2	161

Figure 4 shows the cumulative total of influenza viruses confirmed (sentinel and non-sentinel surveillance) from week 1 to the end of week 34 (29 August 2010). A total of 1683 influenza viruses were identified: pandemic (H1N1) 09 (1402), A (not sub-typed) (271), B (not typed) (6), seasonal A (H3N2) (3) and A/Perth/16/2009⁴ (H3N2) (1).

Figure 4: Cumulative laboratory-confirmed viruses by DHB from week 1 to week 34, 29 August 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 for sentinel and non-surveillance from week 18 (3–9 May 2010) to week 34 (23–29 August 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 18–34 and the total percentage positive from the swabs received

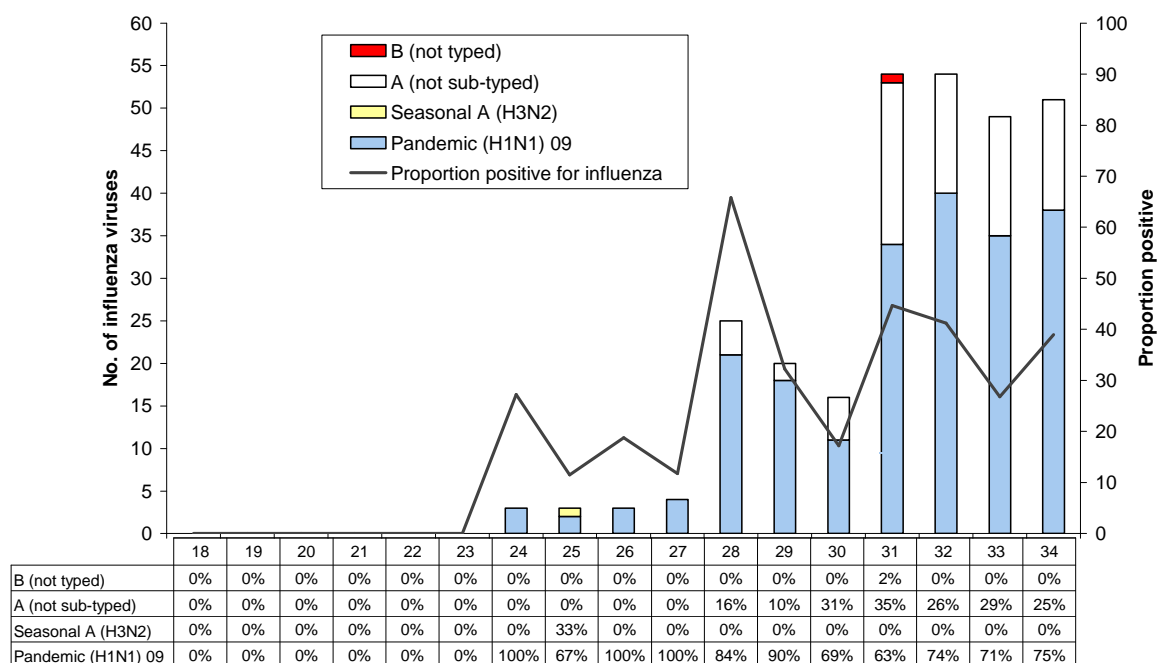


Figure 6: Total influenza viruses from non-sentinel surveillance by type and week reported, week 18–34 and the total percentage positive from the swabs received

