

INFLUENZA WEEKLY UPDATE

2010/32: 9-15 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 32 (9-15 August 2010).

SUMMARY OF THIS REPORT:

- Influenza-like illness (ILI) through sentinel surveillance was reported from 19 out of 20¹ District Health Boards (DHB) with a national consultation rate of 143.8 per 100 000 (507 ILI consultations).
- A total of 1316 swabs were received from sentinel (131) and non-sentinel surveillance (1185). Of these, 418 influenza viruses have been reported through sentinel (56, 13%) and non-sentinel surveillance (362, 87%). The majority of the viruses were pandemic (H1N1) 09 (337, 81%).
- Since January 2010, 999² cases of pandemic (H1N1) 09 have been recorded in EpiSurv³, 375 of which were reported in week 32.

In the past week, a total of 507 consultations for influenza-like illness were reported from 83 general practices in 19 out of 20 DHBs. This gives a weekly consultation rate of 143.8 per 100 000 patient population. Figure 1 shows the weekly national consultation rates for 2008, 2009 seasons, and 2010 to date. The current rate of influenza-like illness is above the baseline.

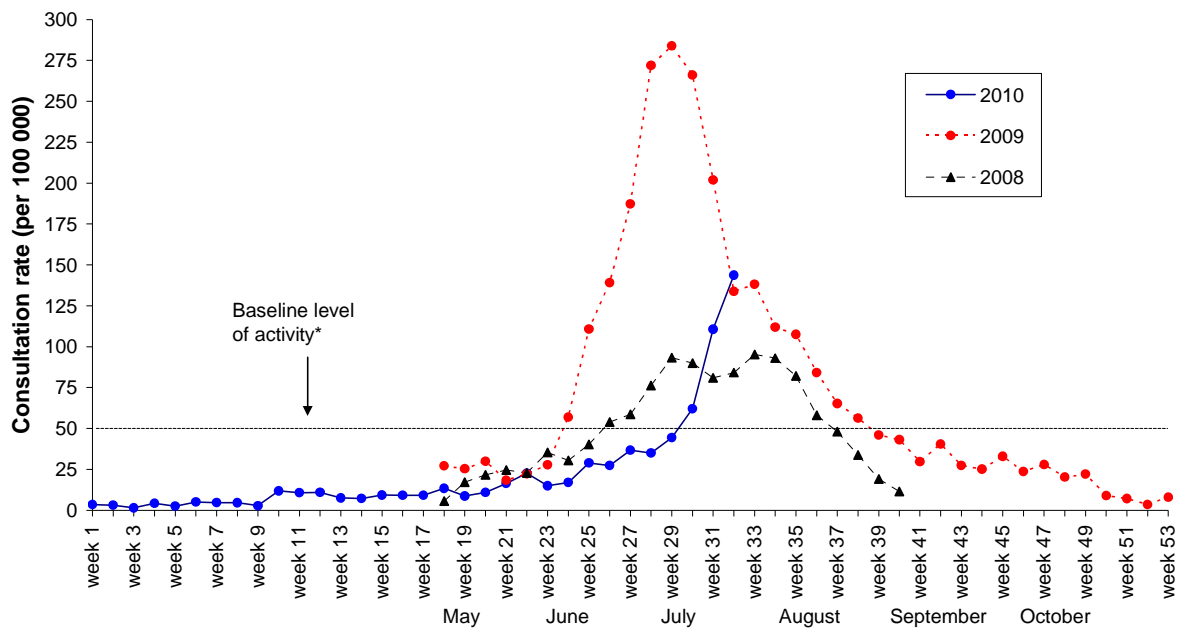
Figure 2 compares the consultation rates for influenza-like illness for each DHB over the past week. Hawke's Bay DHB had the highest consultation rate (481.9 per 100 000, 95 cases), followed by Bay of Plenty (294.6 per 100 000, 17 cases) and Waikato (269.0 per 100 000, 53 cases) DHBs.

¹ Otago and Southland DHBs now combined as Southern DHB.

² Includes confirmed (949), probable (18), and under investigation (32) cases.

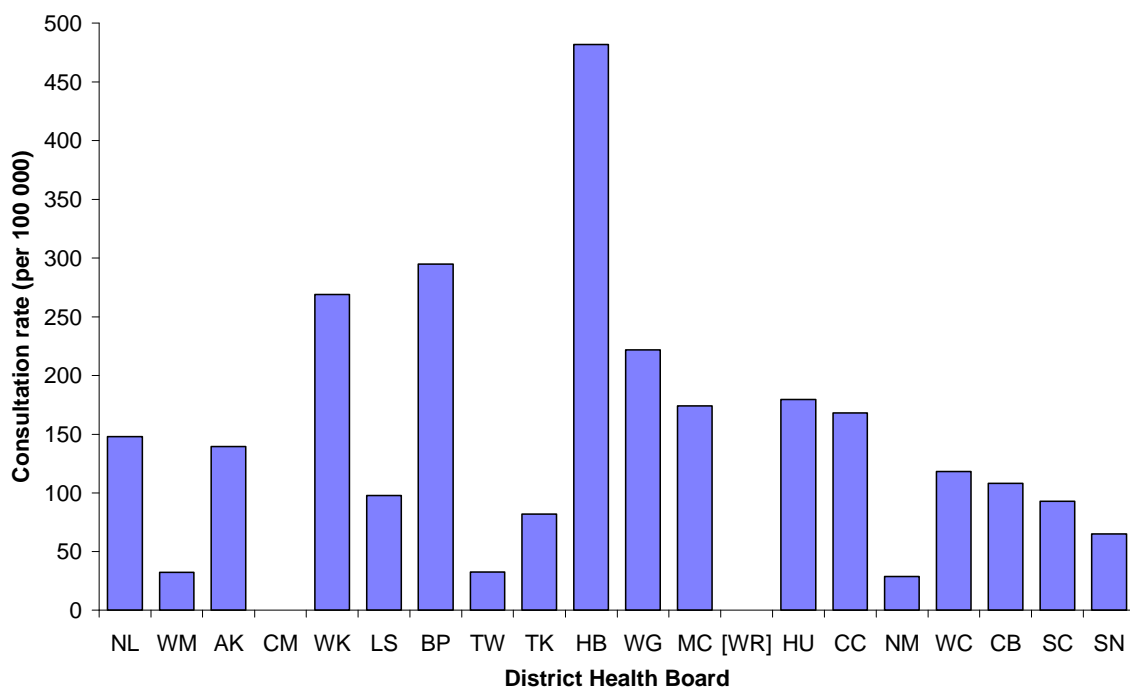
³ Data source: EpiSurv as of 19 August 2010.

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



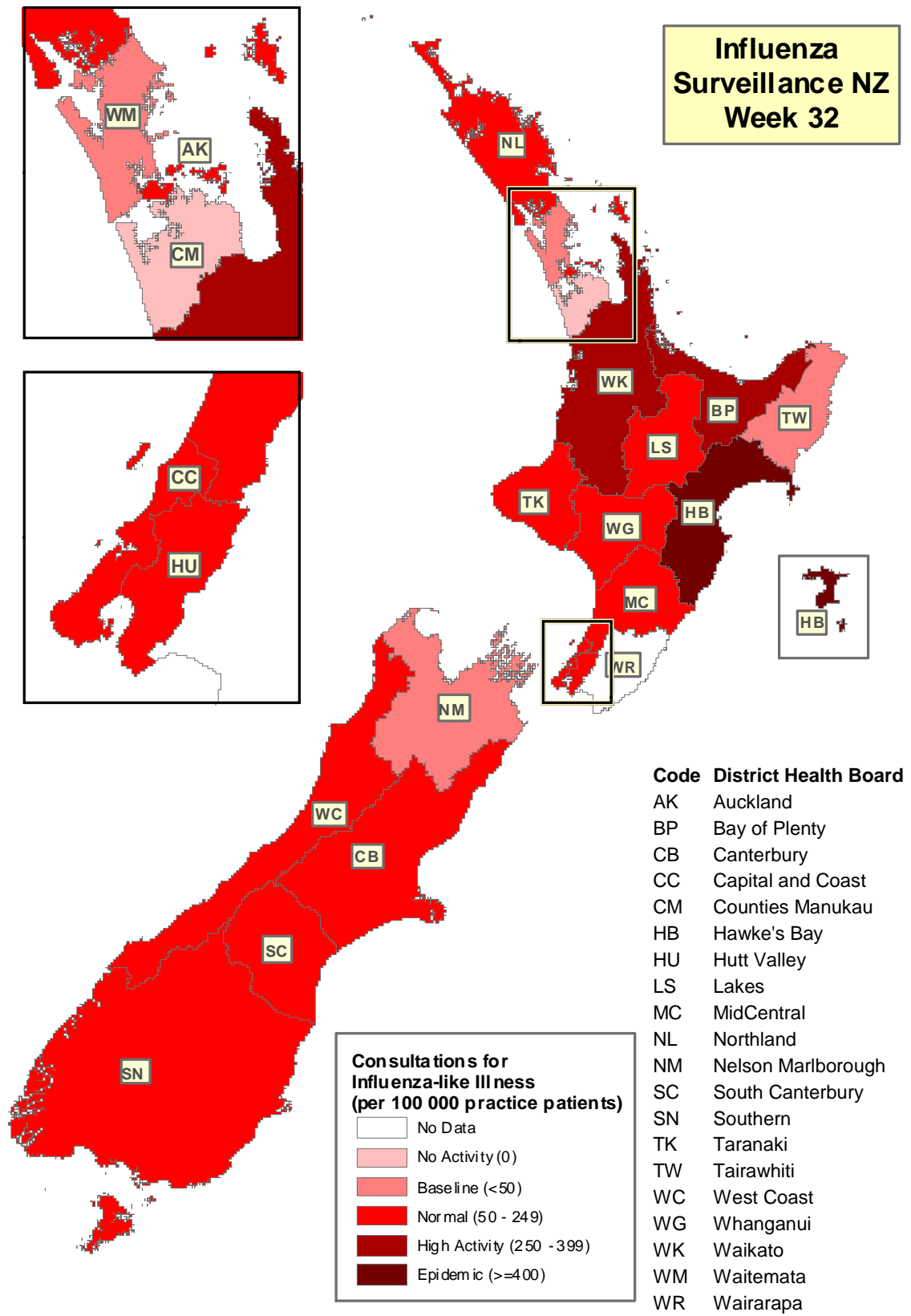
*A weekly rate <50 ILI consultations per 100 000 patient population is considered baseline activity. A rate of 50–249 is considered indicative of normal seasonal influenza activity, and a rate of 250–399 indicative of higher than expected influenza activity. A rate >400 ILI consultations per 100 000 patient population indicates an epidemic level of influenza activity.

Figure 2: Weekly consultation rates for influenza-like illness by DHB week ending 15 August 2010



[] No GP/practice participating in the sentinel surveillance.

Figure 3 illustrates consultation rates for influenza-like illness mapped by DHB for week 32, 2010



A total of 131 swabs were received by virology laboratories from sentinel surveillance. Of these, 56 influenza viruses were identified: pandemic (H1N1) 09 (40) and A (not sub-typed) (16). The distribution by DHB is shown in Table 1.

Table 1: Influenza viruses from sentinel surveillance for week 32 by DHB

Antigenic Strain	NL	AK*	WK	BP	TW	TK	HB	WG	MC	CC	NM	WC	CB	SN	Total
A (not sub-typed)	0	10	3	0	0	1	0	0	0	1	0	0	1	0	16
Pandemic (H1N1) 09	4	1	1	2	1	1	5	1	6	2	1	2	10	3	40
Total	4	11	4	2	1	2	5	1	6	3	1	2	11	3	56

In addition, 1185 swabs were received by virology laboratories from non-sentinel surveillance. Of these, 362 influenza viruses were identified: pandemic (H1N1) 09 (297), A (not sub-typed) (64) and A/Perth/16/2009 (H3N2) (1). The distribution by DHB is shown in Table 2.

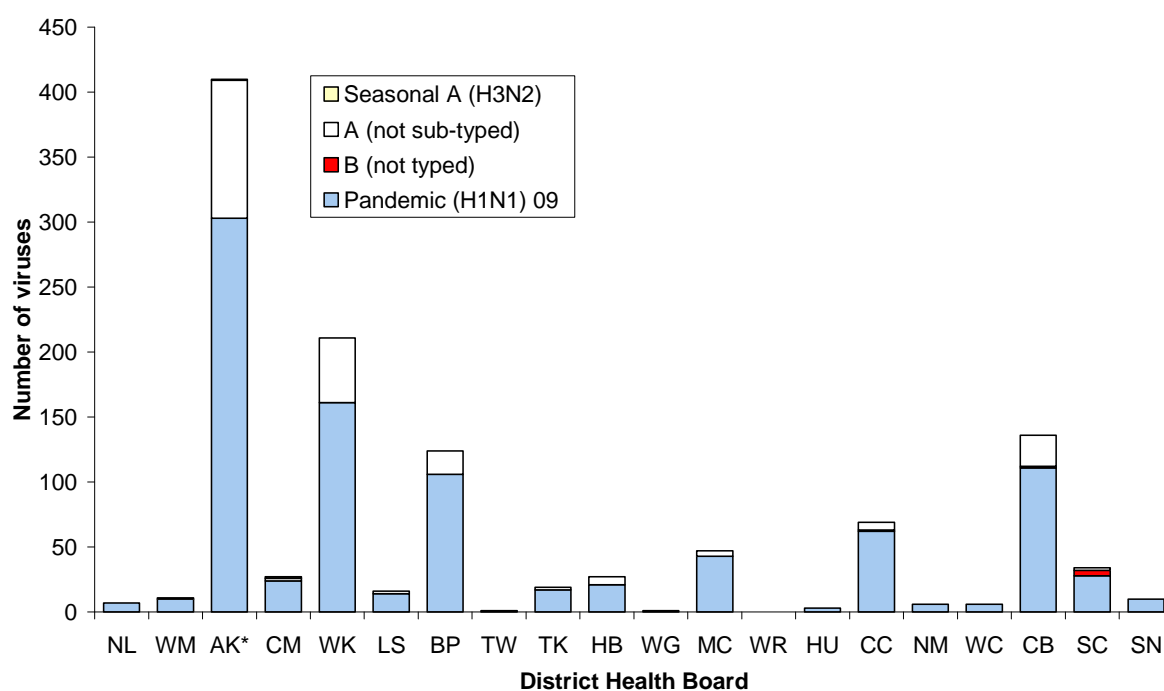
Table 2: Influenza viruses from non-sentinel surveillance for week 32 by DHB

Antigenic Strain	AK*	CM	WK	LS	BP	TK	HB	MC	CC	NM	WC	CB	SC	Total
A (not sub-typed)	22	0	17	1	7	0	4	3	1	0	0	9	0	64
A/Perth/16/2009 (H3N2)	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Pandemic (H1N1) 09	95	7	55	7	49	5	2	25	19	4	1	27	1	297
Total	117	8	72	8	56	5	6	28	20	4	1	36	1	362

A/Perth/16/2009 (H3N2) – like strain is included in the 2010 vaccine formulation for New Zealand.

Figure 5 shows the cumulative total of influenza viruses confirmed (sentinel and non-sentinel surveillance) from week 1 to the end of week 32 (15 August 2010). A total of 1165 influenza viruses were identified: pandemic (H1N1) 09 (934), A (not sub-typed) (223), B (not typed) (6), A/Perth/16/2009 (H3N2) (1) and seasonal A (H3N2) (1).

Figure 4: Cumulative laboratory-confirmed viruses by DHB from week 1 to week 32, 15 August 2010



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

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 32 (9-15 August 2010). Pandemic (H1N1) 09 is greater than the number of seasonal influenza viruses.

Figure 5: Total influenza viruses from sentinel surveillance by type and week reported, week 18-32 and the total percentage positive from the swabs received

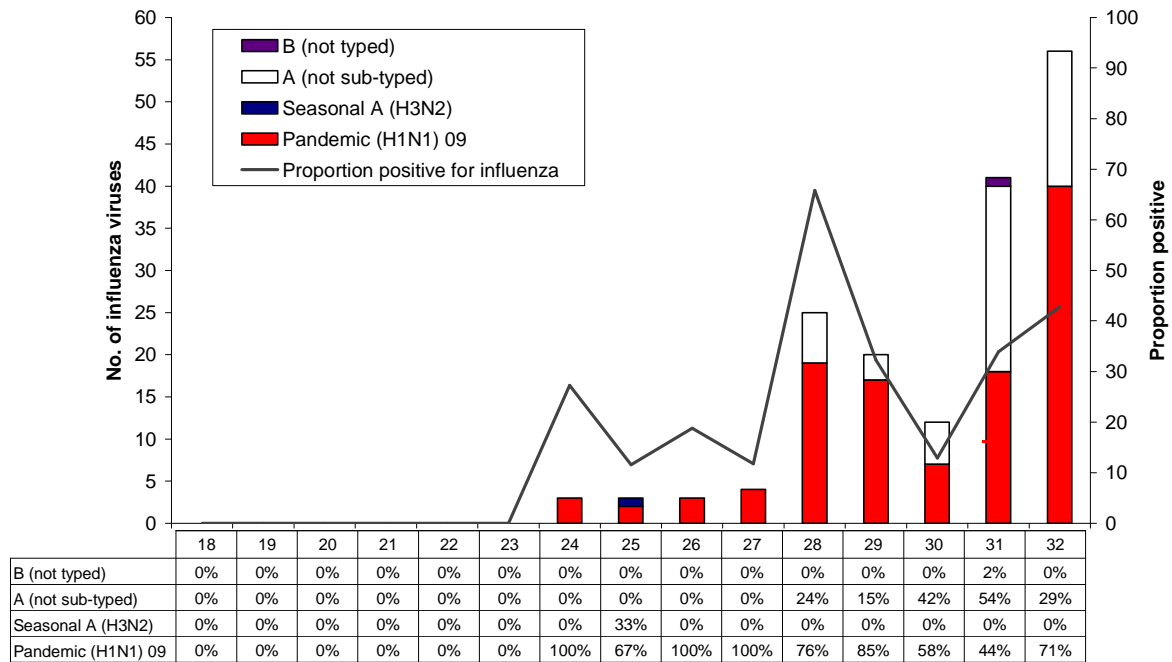


Figure 6: Total influenza viruses from non-sentinel surveillance by type and week reported, week 18-32 and the total percentage positive from the swabs received

