

INFLUENZA WEEKLY UPDATE

2010/33: 16–22 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 33 (16–22 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 151.6 per 100 000 (527 ILI consultations).
- A total of 1328 swabs were received from sentinel (183) and non-sentinel surveillance (1145). Of these, 328 influenza viruses have been reported through sentinel (51, 16%) and non-sentinel surveillance (277, 84%). The majority of the viruses were pandemic (H1N1) 09 (279, 85%).
- Since January 2010, 1234² cases of pandemic (H1N1) 09 have been recorded in EpiSurv³, 238 of which were reported in week 33.

In the past week, a total of 527 consultations for influenza-like illness were reported from 81 general practices in 19 out of 20 DHBs. This gives a weekly consultation rate of 151.6 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.

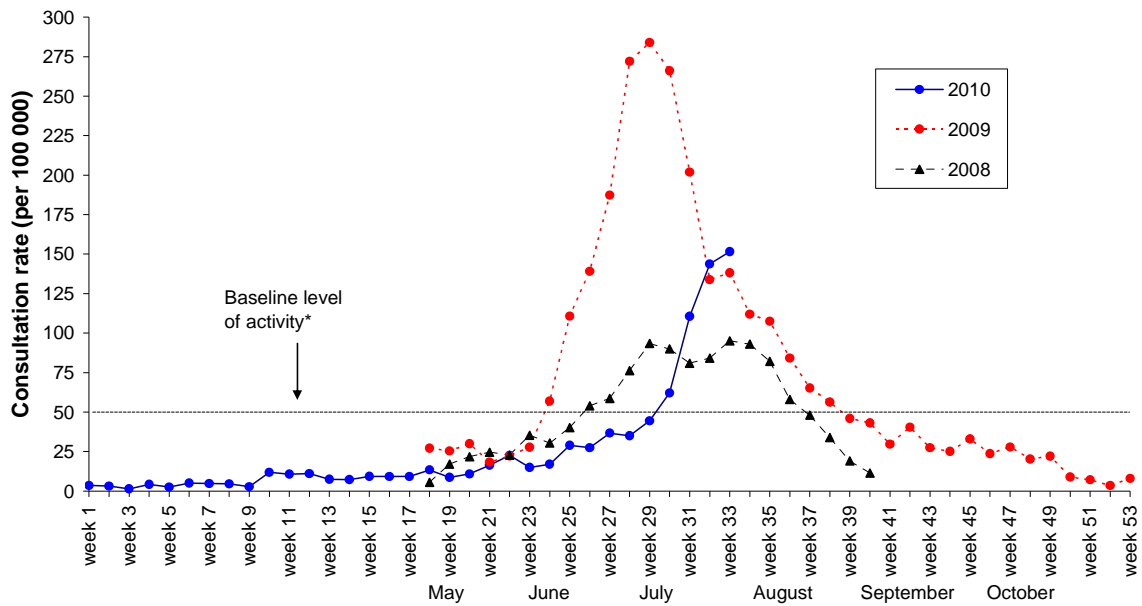
Figure 2 compares the consultation rates for influenza-like illness for each DHB over the past week. Hawke's Bay DHB had the highest consultation rate (354.6 per 100 000, 72 cases), followed by Hutt Valley (303.9 per 100 000, 105 cases) and Lakes (283.8 per 100 000, 10 cases) DHBs.

¹ Otago and Southland DHBs now combined as Southern DHB.

² Includes confirmed (1176), probable (22), and under investigation (36) cases.

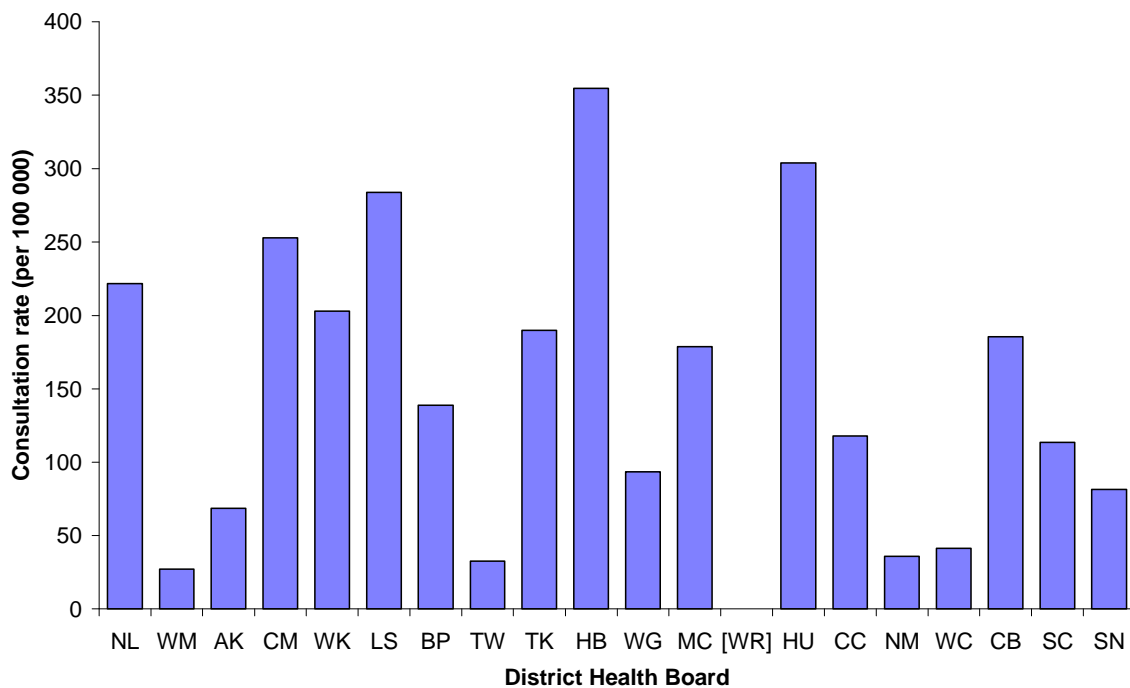
³ Data source: EpiSurv as of 26 August 2010.

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



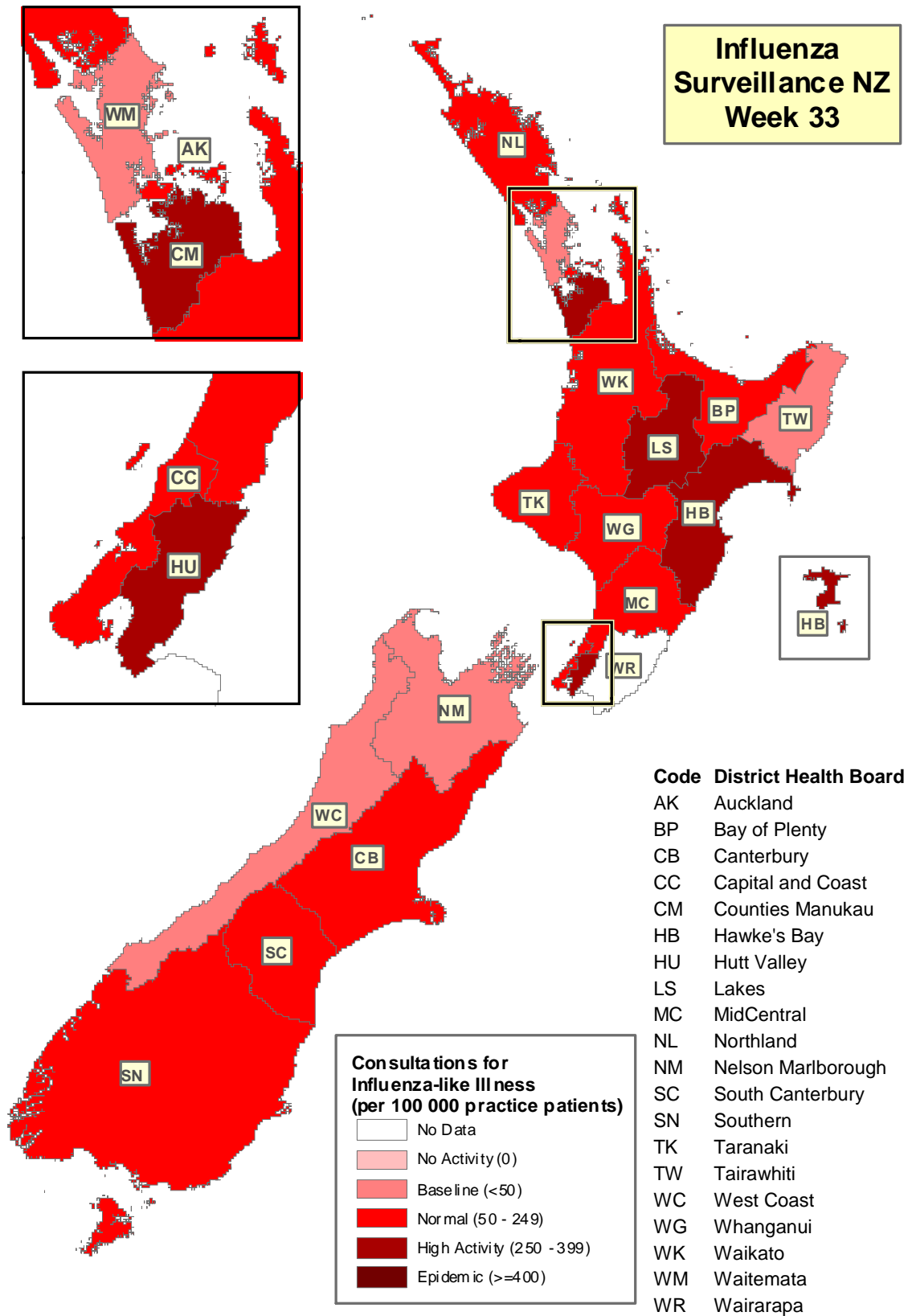
*A weekly rate <50 influenza-like illness consultations per 100 000 patient population is considered baseline activity. A rate of 50–249 is considered indicative of normal seasonal influenza activity, and a rate of 250–399 indicative of higher than expected influenza activity. A rate >400 influenza-like 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 22 August 2010



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

Figure 3 Consultation rates for influenza-like illness mapped by DHB for week 33, 2010



A total of 183 swabs were received by virology laboratories from sentinel surveillance. Of these, 51 influenza viruses were identified: pandemic (H1N1) 09 (37) and A (not sub-typed) (14). The distribution by DHB is shown in Table 1.

Table 1: Influenza viruses from sentinel surveillance for week 33 by DHB

Antigenic Strain	AK	CM	WK	HB	WG	MC	CC	CB	Total
A (not sub-typed)	8	0	1	1	1	1	1	1	14
Pandemic (H1N1) 09	8	1	10	0	0	0	0	18	37
Total	16	1	11	1	1	1	1	19	51

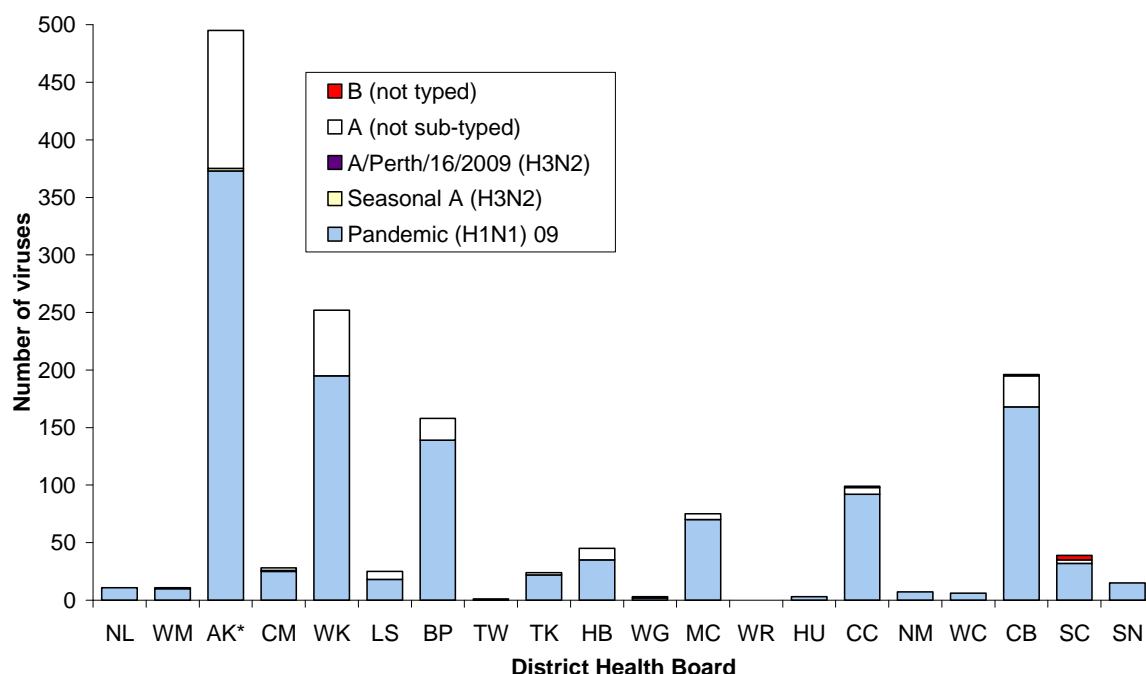
In addition, 1145 swabs were received by virology laboratories from non-sentinel surveillance. Of these, 277 influenza viruses were identified: pandemic (H1N1) 09 (242) and A (not sub-typed) (35). The distribution by DHB is shown in Table 2.

Table 2: Influenza viruses from non-sentinel surveillance for week 33 by DHB

Antigenic Strain	NL	AK	WK	LS	BP	TK	HB	WG	MC	CC	NM	CB	SC	SN	Total
A (not sub-typed)	0	16	6	5	2	0	3	0	0	0	0	2	1	0	35
Pandemic (H1N1) 09	4	53	24	4	32	5	14	1	27	29	1	39	4	5	242
Total	4	69	30	9	34	5	17	1	27	29	1	41	5	5	277

Figure 4 shows the cumulative total of influenza viruses confirmed (sentinel and non-sentinel surveillance) from week 1 to the end of week 33 (15 August 2010). A total of 1493 influenza viruses were identified: pandemic (H1N1) 09 (1224), A (not sub-typed) (260), B (not typed) (6), seasonal A (H3N2) (2) and A/Perth/16/2009⁴ (H3N2) (1).

Figure 4: Cumulative laboratory-confirmed viruses by DHB from week 1 to week 33, 22 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 33 (16–22 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 18–33 and the total percentage positive from the swabs received

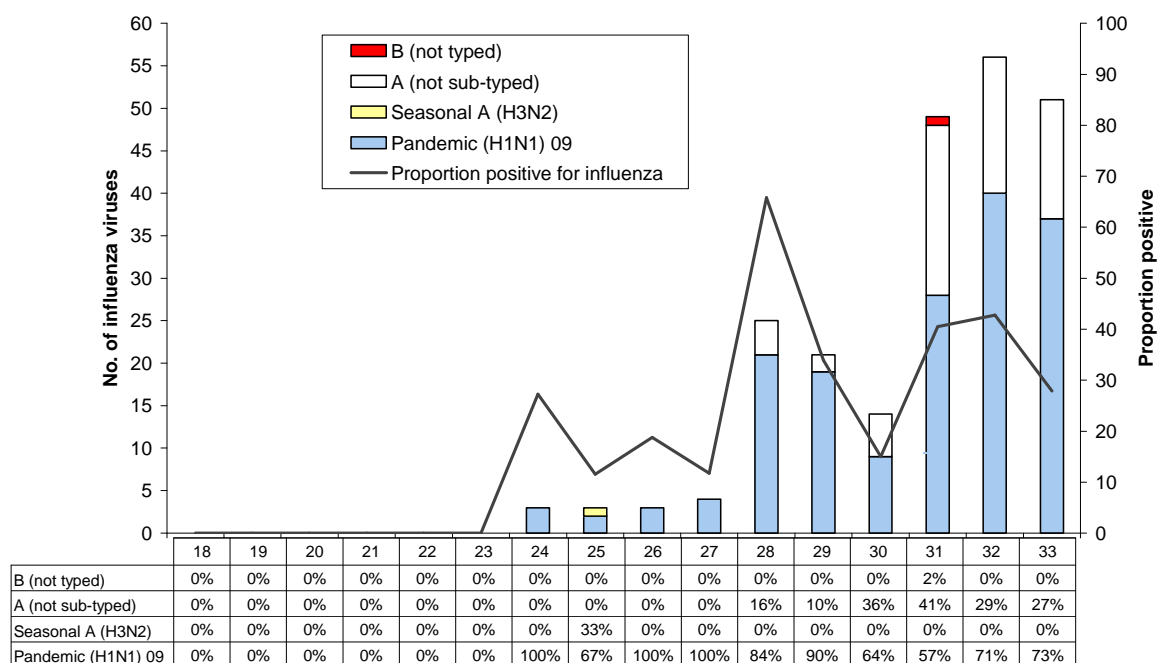
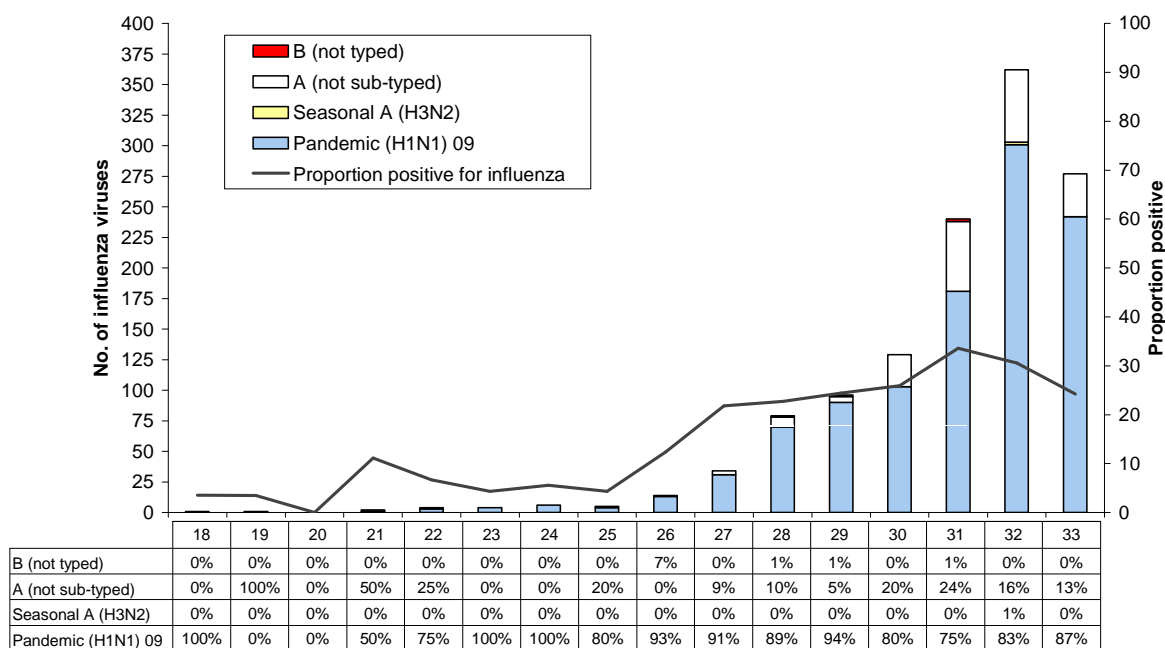


Figure 6: Total influenza viruses from non-sentinel surveillance by type and week reported, week 18–33 and the total percentage positive from the swabs received



Compiled by:

Liza Lopez

Population and Environmental Health

ESR Kenepuru Science Centre

PO Box 50 348, PORIRUA

Tel : 04 914 0647 Fax: 04 978 6690 Email:liza.lopez@esr.cri.nz

Dr Sue Huang

WHO National Influenza Centre

ESR Wallaceville Science Centre

PO Box 40158, Upper Hutt