

# INFLUENZA WEEKLY UPDATE

2010/39: 27 September – 3 October 2010

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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 39 (27 September – 3 October 2010).

## REPORT SUMMARY

- Influenza-like illness (ILI) through sentinel surveillance was reported by 19<sup>1</sup> of the 20 District Health Boards (DHB) with a national consultation rate of 16.5 per 100 000 (57 ILI consultations).
- A total of 321 swabs were received from sentinel (22) and non-sentinel surveillance (299). Of these, 16 influenza viruses have been reported through sentinel (5, 31%) and non-sentinel surveillance (11, 69%). The majority of the viruses were pandemic (H1N1) 09 (13, 81%).
- Since January 2010, 1810<sup>2</sup> cases of pandemic (H1N1) 09 have been recorded in EpiSurv<sup>3</sup>, 12 of which were reported in week 39.

In the past week, a total of 57 consultations for ILI were reported from 81 general practices in 19 of the 20 DHBs. This gives a weekly consultation rate of 16.5 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 ILI is below the baseline.

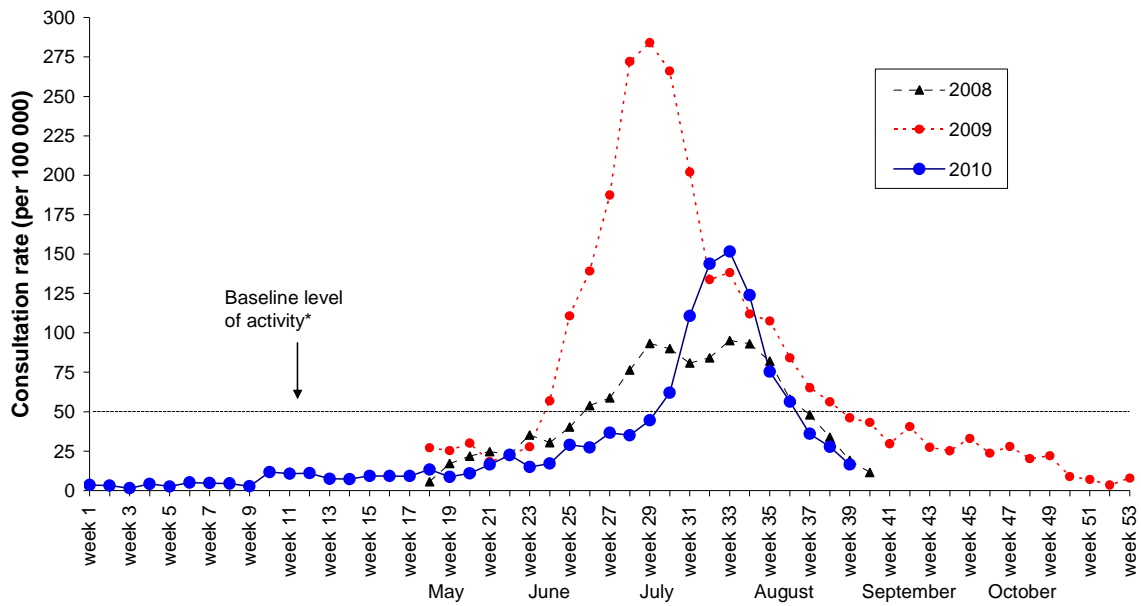
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<sup>1</sup> Otago and Southland DHBs now combined as Southern DHB.

<sup>2</sup> Includes confirmed (1759), probable (24), and under investigation (27) cases.

<sup>3</sup> Data source: EpiSurv as of 7 October 2010.

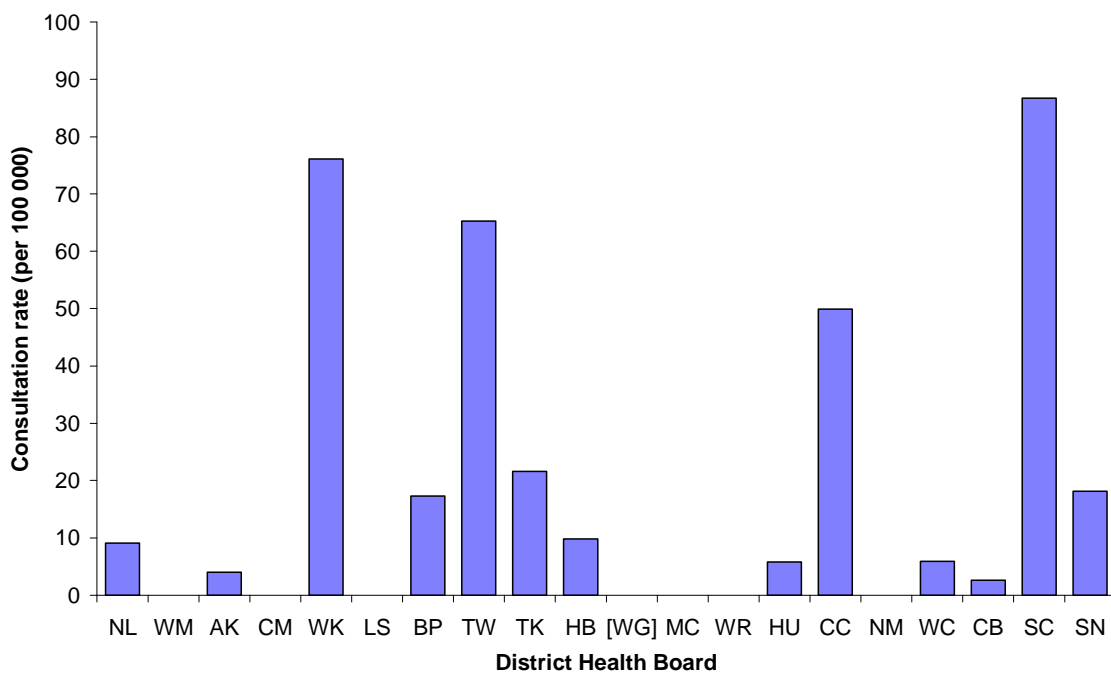
**Figure 1: Weekly consultation rates for ILI in New Zealand, 2008, 2009 and 2010**



\*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 compares the consultation rates for ILI for each DHB over the past week. South Canterbury DHB had the highest consultation rate (86.7 per 100 000, 5 cases), followed by Waikato (76.1 per 100 000, 15 cases) and Tairāwhiti (65.3 per 100 000, 2 cases) DHBs.

**Figure 2: Weekly consultation rates for ILI by DHB for the week ending 3 October 2010**



[ ] No data for the week

Figure 3 maps the consultation rates for ILI by DHB.

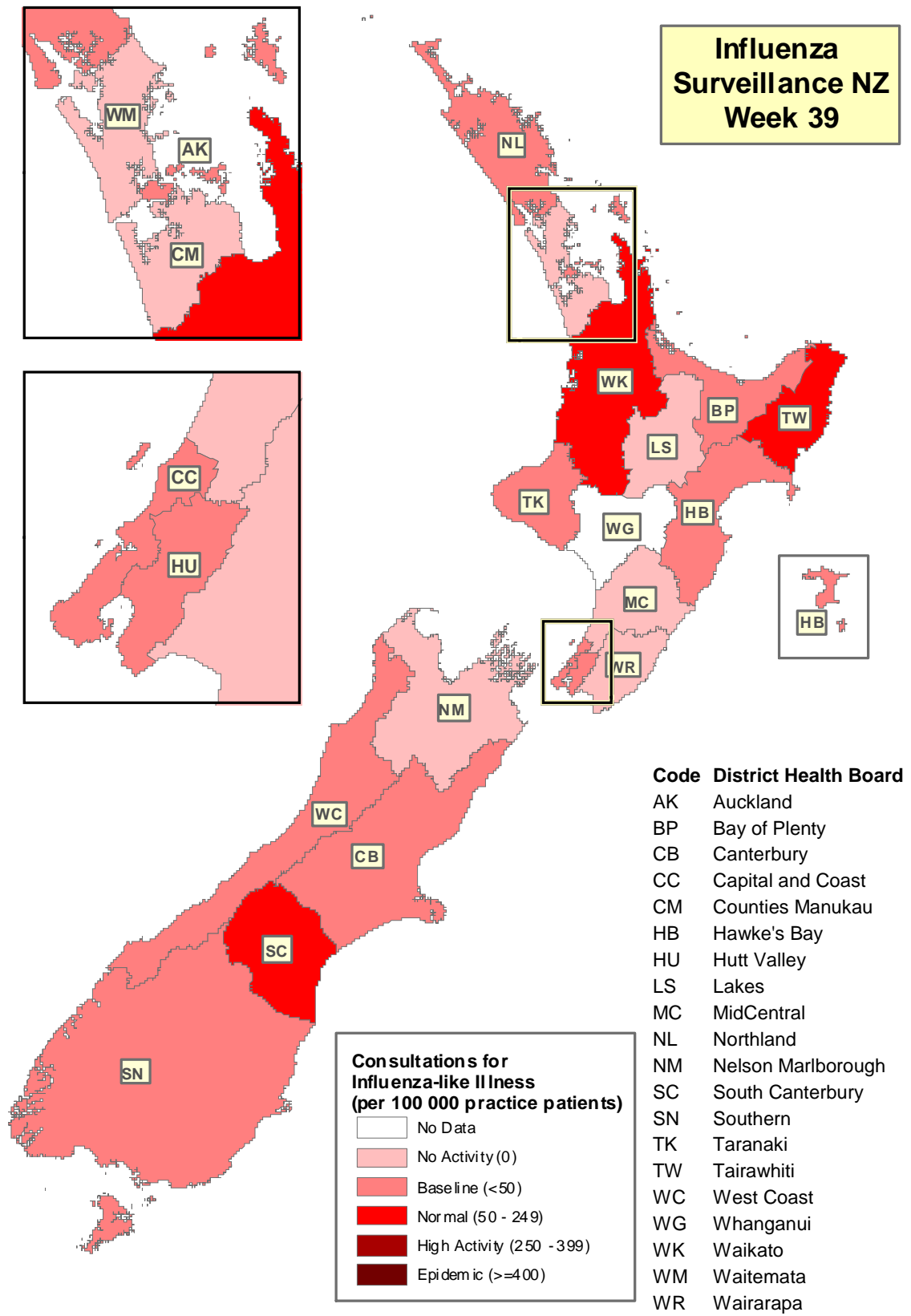


Figure 3: Consultation rates for ILI by DHB for week 39, 2010

A total of 22 swabs were received by virology laboratories from sentinel surveillance. Of these five pandemic (H1N1) 09 viruses were identified, from Whanganui (2), Canterbury (2) and MidCentral (1) DHBs.

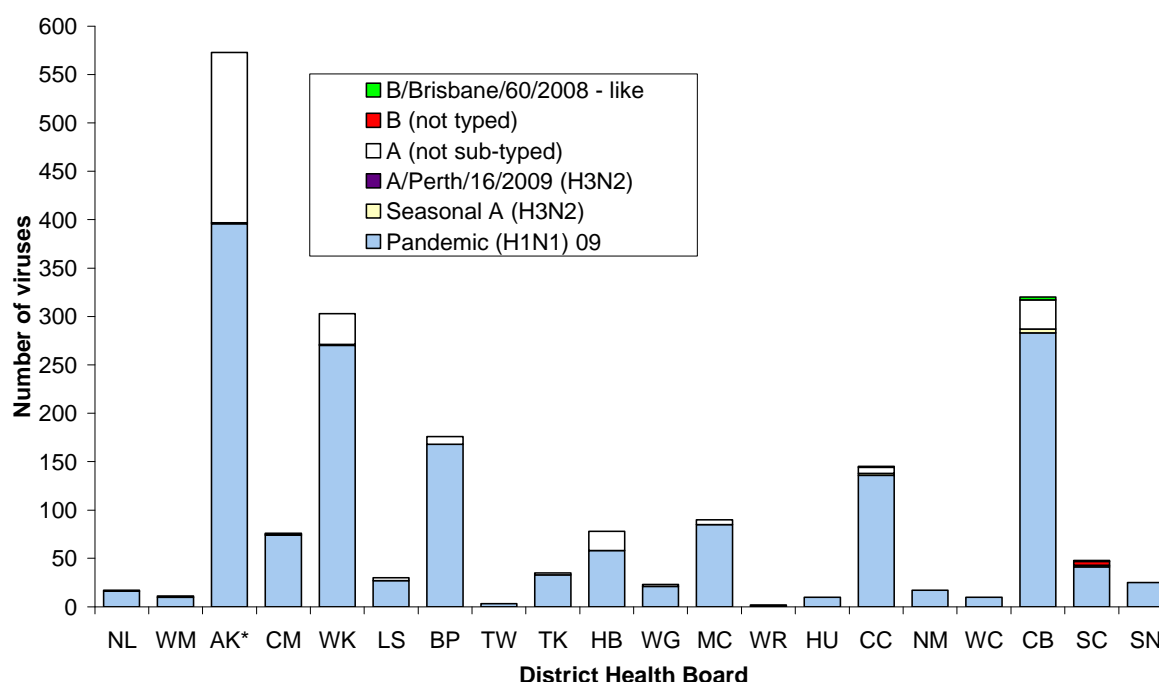
In addition, 299 swabs were received by virology laboratories from non-sentinel surveillance. Of these, 11 influenza viruses were identified: comprising pandemic (H1N1) 09 (8), A (not sub-typed) (2) and seasonal A (H3N2) (1). The distribution by DHB is shown in Table 1.

**Table 1: Influenza viruses from non-sentinel surveillance for week 39 by DHB**

Antigenic Strain	AK*	WK	HB	CC	CB	SC	Total
A (not sub-typed)	0	1	1	0	0	0	2
Pandemic (H1N1) 09	1	1	0	1	4	1	8
Seasonal A (H3N2)	0	0	0	1	0	0	1
<b>Total</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>4</b>	<b>1</b>	<b>11</b>

Figure 4 shows the cumulative total of influenza viruses confirmed (sentinel and non-sentinel surveillance) from week 1 to the end of week 39 (3 October 2010). A total of 1992 influenza viruses were identified: pandemic (H1N1) 09 (1684), A (not sub-typed) (290), seasonal A (H3N2) (7), B (not typed) (5), B/Brisbane/60/2008 (4) and A/Perth/16/2009<sup>4</sup> (H3N2) (2).

**Figure 4: Cumulative laboratory-confirmed viruses by DHB from week 1 to week 39, 3 October 2010**

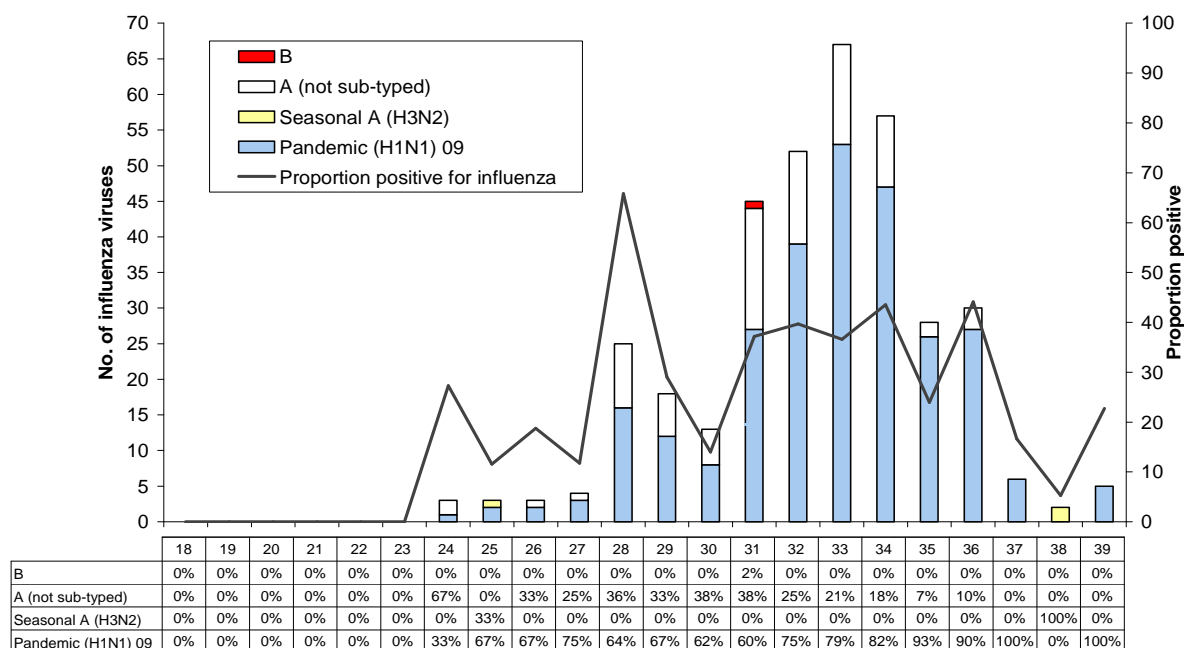


\*Note: Viruses from Auckland without DHB codes have been temporarily assigned to Auckland (AK).

<sup>4</sup> A/Perth/16/2009 (H3N2) and B/Brisbane/60/2008 viruses are 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 39 (27 September – 3 October 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 18–39 and the total percentage positive from the swabs received**



**Figure 6: Total influenza viruses from non-sentinel surveillance by type and week reported, week 18–39 and the total percentage positive from the swabs received**

