INFLUENZA WEEKLY UPDATE

2013/29: 15–21 July 2013

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 for week 29 (15–21 July 2013).

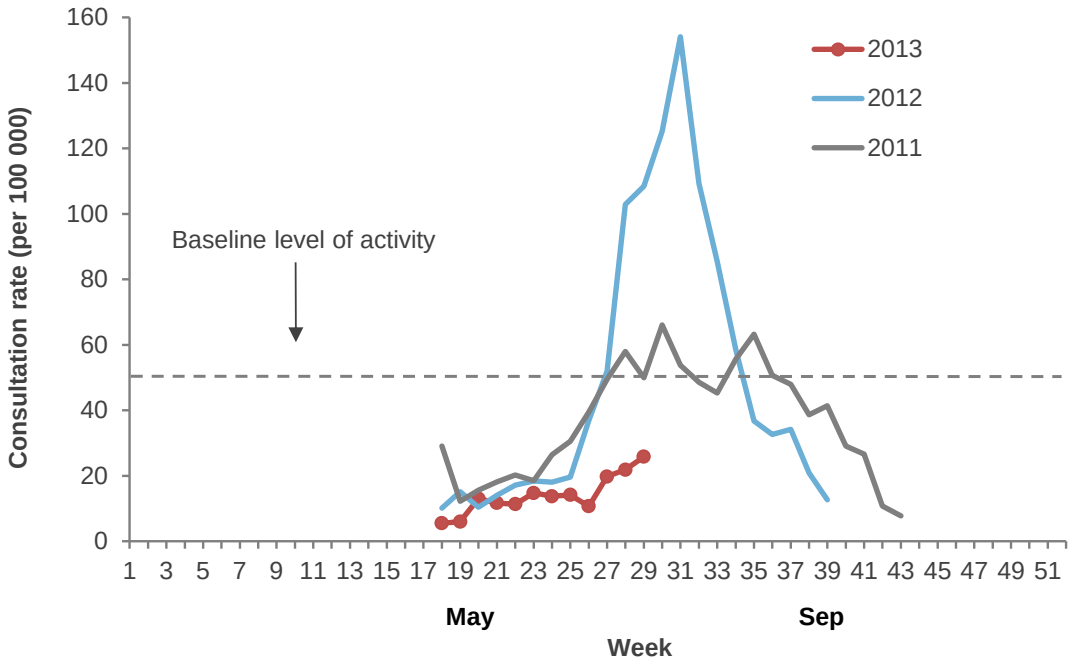
Summary

- ILI through sentinel surveillance was reported from 18 out of 20 District Health Boards (DHB) with a national consultation rate of 25.8 per 100 000 (94 ILI consultations).
- A total of 260 swabs were received from sentinel (20) and non-sentinel (240) surveillance.
- 73 influenza viruses were identified: B (lineage not determined) (35), A(H3N2) (15), A (not sub-typed) (14), and A(H1N1)pdm09 (9).

INFLUENZA-LIKE ILLNESS SURVEILLANCE

In the past week, a total of 94 consultations for influenza-like illness were reported from 65 general practices in 18 out of 20 DHBs. This gives a weekly consultation rate of 25.8 per 100 000 patient population. Figure 1 shows the weekly national consultation rates for 2011, 2012 seasons, and 2013 so far. The current rate of influenza-like illness is below the baseline.

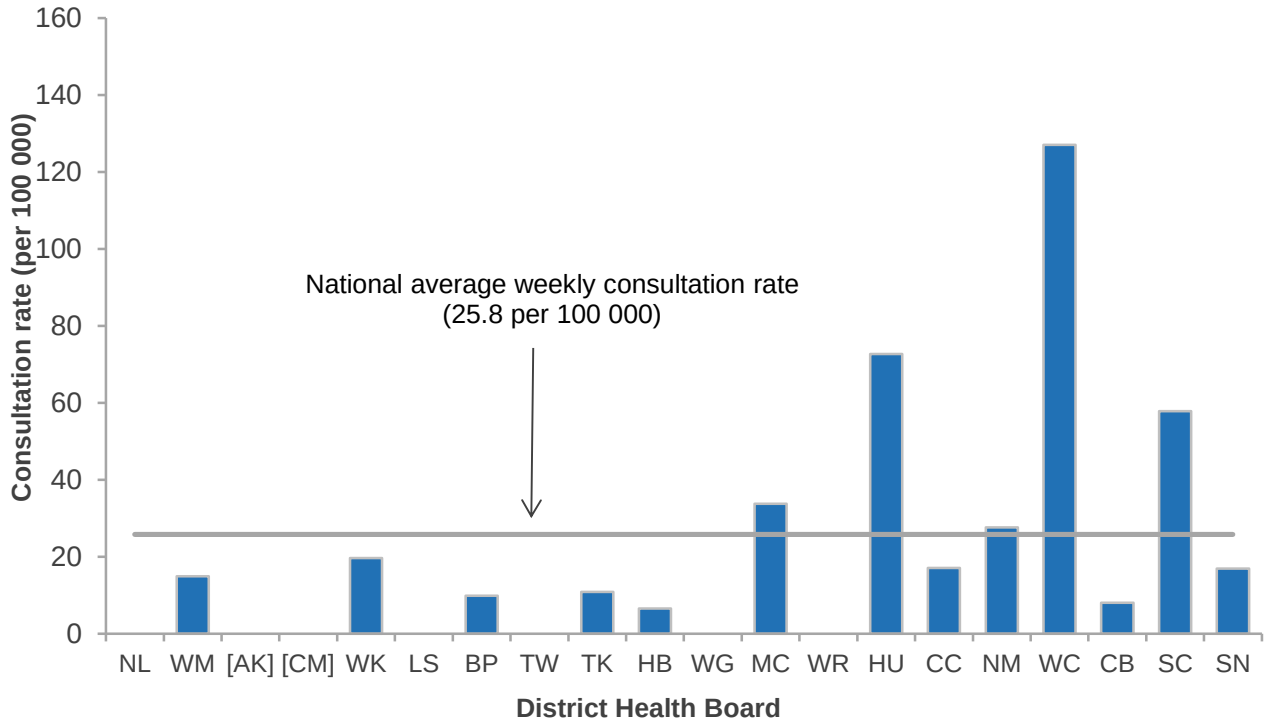
Figure 1. Weekly consultation rates for influenza-like illness in New Zealand, 2011, 2012 and 2013



* 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.

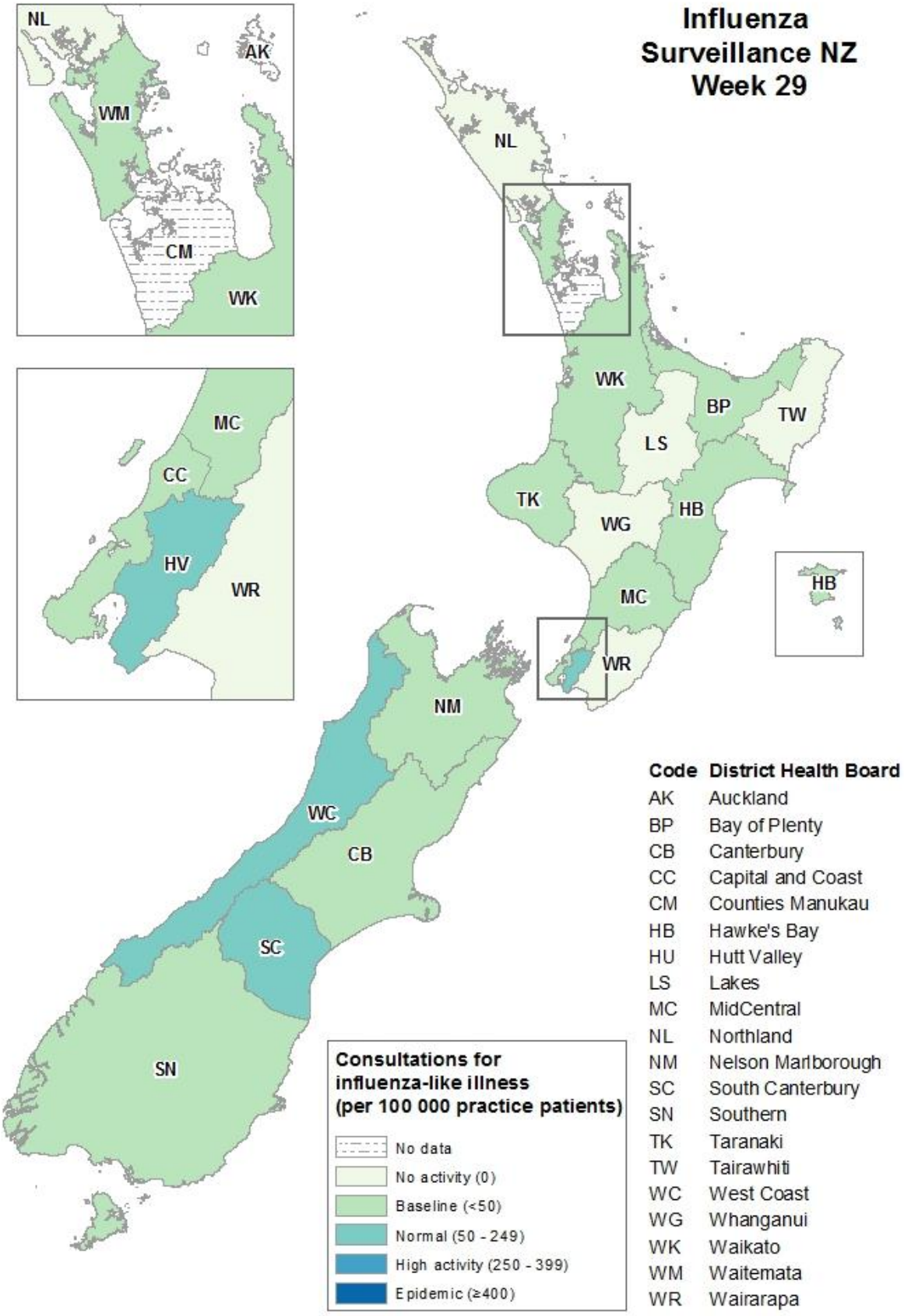
Figure 2 compares the consultation rates for influenza-like illness for each DHB over the past week. West Coast DHB had the highest consultation rate (127.0 per 100 000, 25 cases), followed by Hutt Valley (72.7 per 100 000, 25 cases) and South Canterbury (57.9 per 100 000, 4 cases).

Figure 2. Weekly consultation rates for influenza-like illness by DHB week ending 21 July 2013



[ ] Not participating in the influenza sentinel surveillance.
Note: Auckland (AK) and Counties Manukau (CM) DHBs follow the Southern Hemisphere Influenza and Vaccine Effectiveness Research and Surveillance (SHIVERS) case definition which is different from this sentinel surveillance. Based on the SHIVERS weekly report, the ILI incidence for Auckland and Counties Manukau DHBs for week 29 were 61.6 per 100 000 and 36.6 per 100 000 patient populations, respectively. For more details, please refer to the website: http://www.esr.cri.nz/competencies/shivers/Pages/SHIVERSReports.aspx

Figure 3. Consultation rates for influenza-like illness mapped by DHB for week 29, 2013



VIROLOGICAL SURVEILLANCE

A total of 20 swabs were received by virology laboratories from sentinel surveillance. Of these nine[1] viruses were identified: B (lineage not determined) (5), A(H1N1)pdm09 (2), A(H3N2) (1), and A (not sub-typed) (1). The distribution by DHB is shown in Table 1.

Table 1. Influenza viruses from sentinel surveillance for week 29 by DHB

Antigenic Strain	DHB					Total
	WK	LS	BP	MC	SN	
A (not sub-typed)	0	0	0	1	0	**1**
A(H1N1)pdm09	1	0	0	0	1	**2**
A(H3N2)	0	0	1	0	0	**1**
B (lineage not determined)	0	1	4	0	0	**5**
Total	**1**	**1**	**5**	**1**	**1**	**9**

In addition, 240 swabs were received by virology laboratories from non-sentinel surveillance. Of these, 64 influenza viruses were identified: B (lineage not determined) (30), A(H3N2) (14), A (not sub-typed) (13), and A(H1N1)pdm09 (7). The distribution by DHB is shown in Table 2.

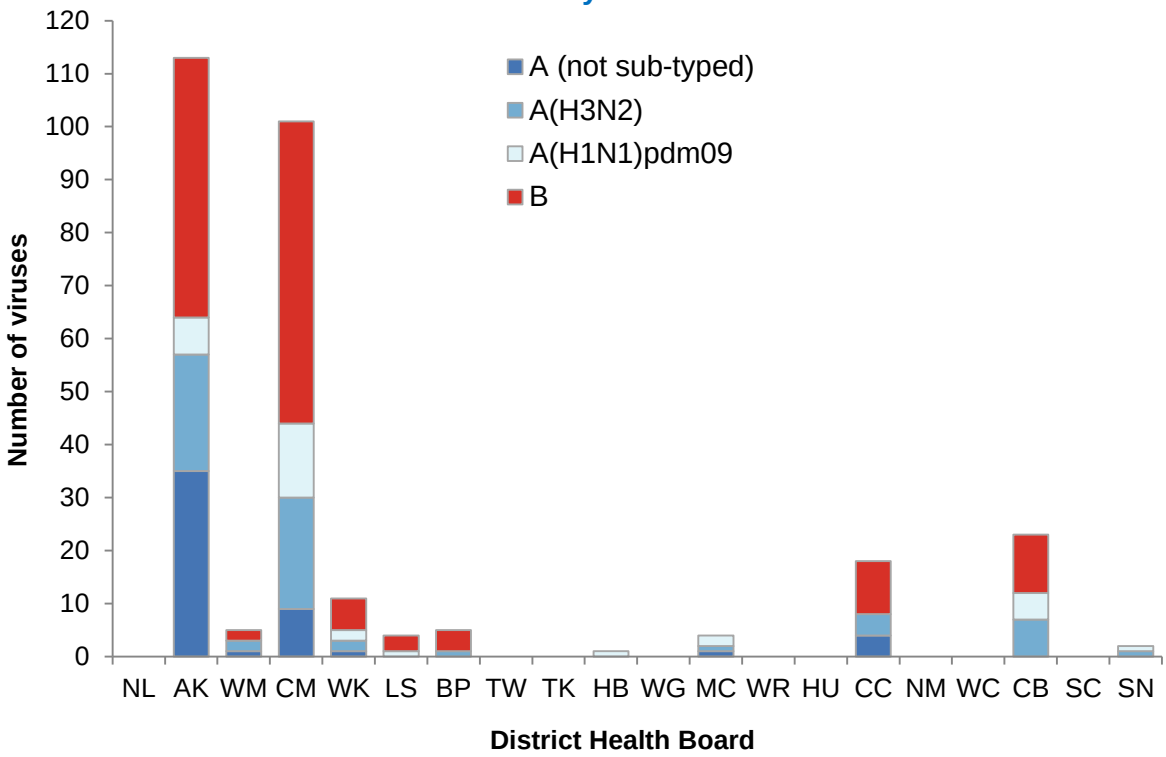
Table 2. Influenza viruses from non-sentinel surveillance for week 29 by DHB

Antigenic Strain	DHB							Total
	WM	AK	CM	WK	MC	CC	CB	
A (not sub-typed)	1	10	1	0	0	1	0	**13**
A(H1N1)pdm09	0	3	1	1	2	0	0	**7**
A(H3N2)	2	3	7	1	0	1	0	**14**
B (lineage not determined)	2	14	6	5	0	2	1	**30**
Total	**5**	**30**	**15**	**7**	**2**	**4**	**1**	**64**

Figure 4 shows the cumulative total of influenza viruses confirmed (sentinel and non-sentinel surveillance) from week 1 to the end of week 29 (21 July 2013). A total of 287 influenza viruses were identified: B (142) including six B/Wisconsin/1/2010-like viruses and three of B/Brisbane/60/2008-like, A(H3N2) (61) including one A/Victoria/361/2011 (H3N2)-like virus, A (not sub-typed) (51), and A(H1N1)pdm09 (33) including five A/California/7/2009 (H1N1)-like viruses.

[1] Only 1 out of the 9 viruses had date specimen taken for the current week (15–21 July 2013), the remaining viruses were taken on previous weeks.

Figure 4. Cumulative laboratory-confirmed viruses by DHB from week 1 to week 29, 21 July 2013



Oseltamivir resistance monitoring, WHO National Influenza Centre, Institute of Environmental Science and Research (ESR)

From 1 January–17 July 2013, 81 influenza viruses: B (55), A(H3N2) (15), and A(H1N1)pdm09 (11) were tested for antiviral susceptibility. None of them showed resistance to the neuraminidase inhibitor oseltamivir (Tamiflu).

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