

INFLUENZA WEEKLY UPDATE

2013/32: 5–11 August 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 32 (5–11 August 2013).

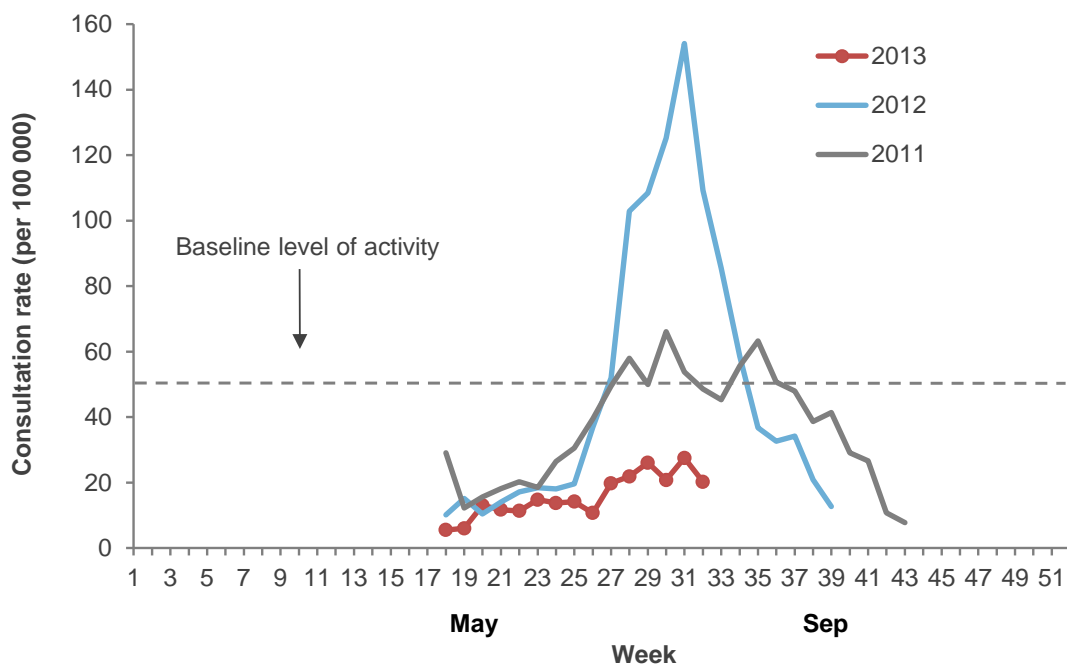
Summary

- ILI through sentinel surveillance was reported from 18 out of 20 District Health Boards (DHB) with a national consultation rate of 20.2 per 100 000 (76 ILI consultations).
- A total of 287 swabs were received from sentinel (39) and non-sentinel (248) surveillance.
- 105 influenza viruses were identified: B (53) including five B/Wisconsin/1/2010-like viruses, A(H3N2) (33) including two A/Victoria/361/2011 (H3N2)-like virus, A (not sub-typed) (11), and A(H1N1)pdm09 (8).

INFLUENZA-LIKE ILLNESS SURVEILLANCE

In the past week, a total of 76 consultations for influenza-like illness were reported from 68 general practices in 18 out of 20 DHBs. This gives a weekly consultation rate of 20.2 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.

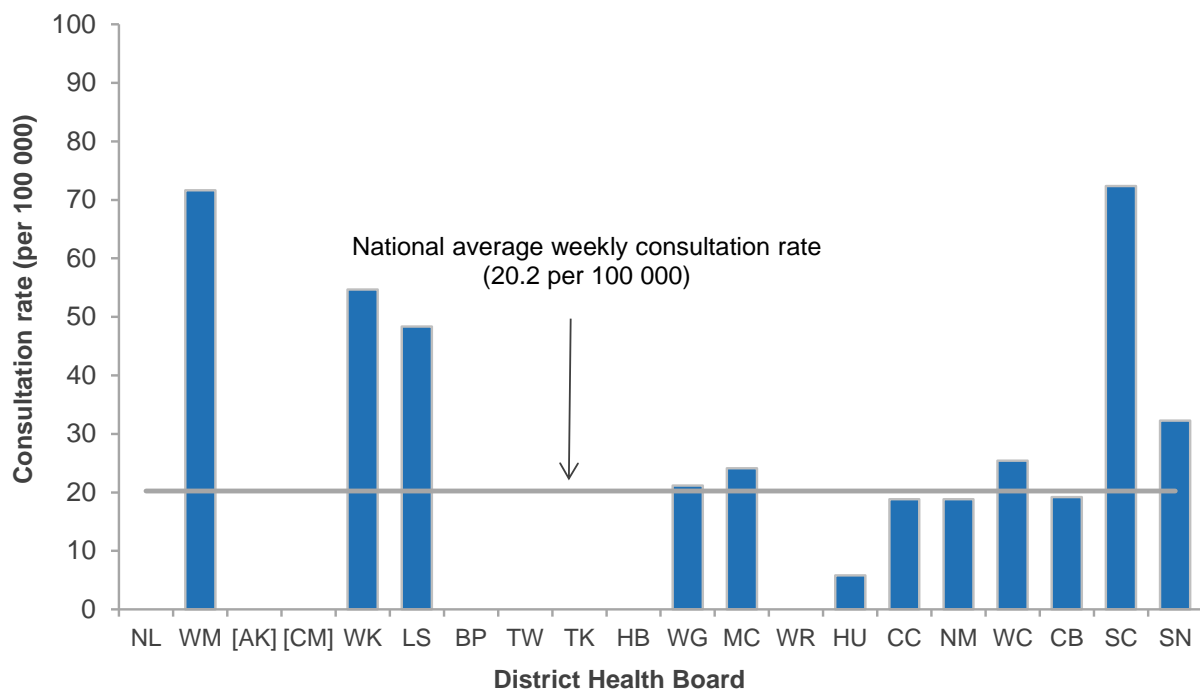
Figure 1. Weekly consultation rates for influenza-like illness in New Zealand, 2011, 2012 and 2013



* 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. South Canterbury DHB had the highest consultation rate (72.4 per 100 000, 5 cases), followed by Waitemata (71.7 per 100 000, 4 cases), and Waikato (54.7 per 100 000, 10 cases).

Figure 2. Weekly consultation rates for influenza-like illness by DHB week ending 11 August 2013

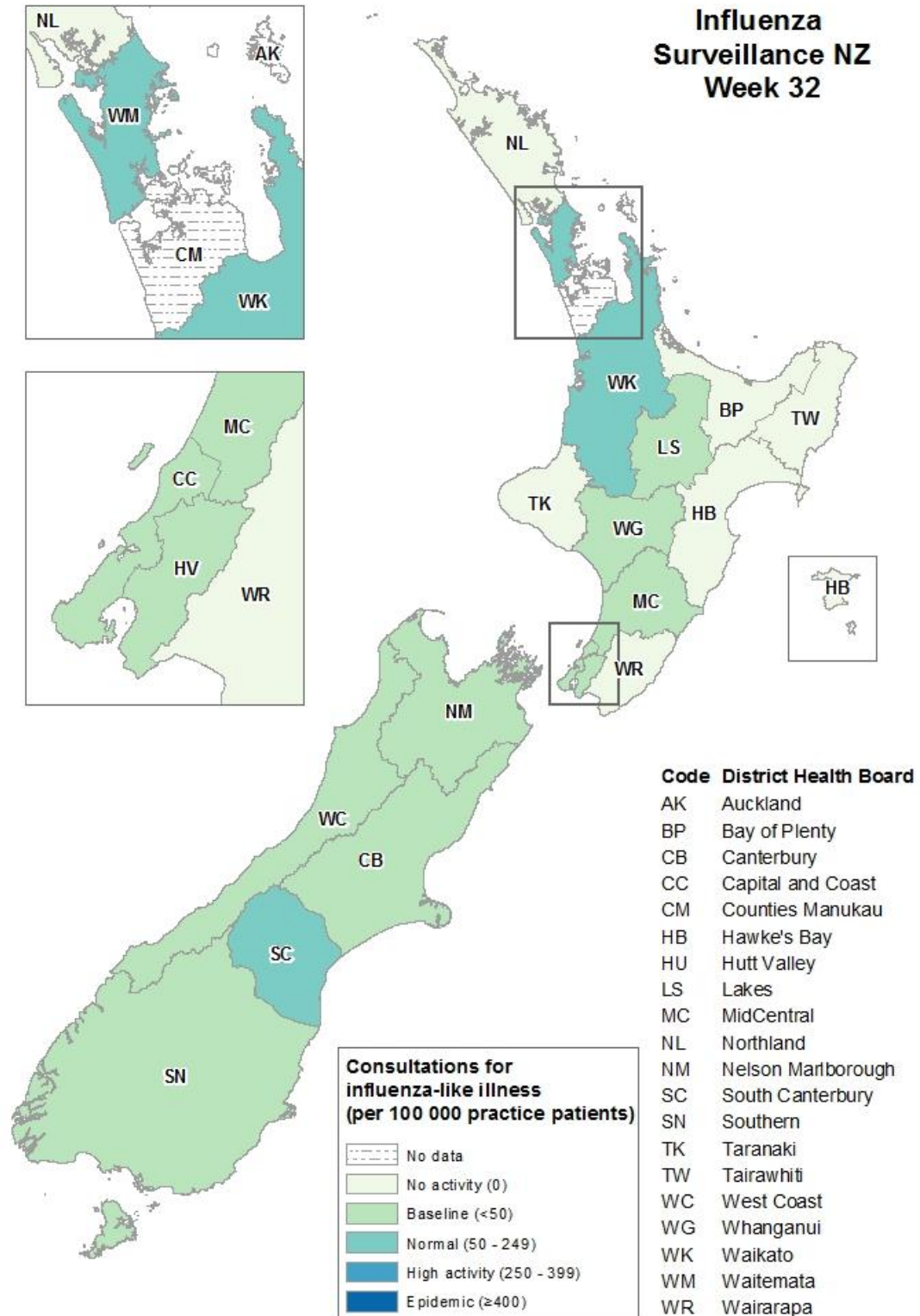


[] Not participating in the influenza sentinel surveillance.

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 32 were 113.2 per 100 000 and 38.9 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 32, 2013



VIROLOGICAL SURVEILLANCE

A total of 39 swabs were received by virology laboratories from sentinel surveillance. Of these eight viruses were identified: B (lineage not determined) (6), A(H1N1)pdm09 (1), and A(H3N2) (1). The distribution by DHB is shown in Table 1.

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

Antigenic Strain	DHB					Total
	WM	LS	BP	MC	CB	
A(H1N1)pdm09	0	0	0	0	1	1
A(H3N2)	0	0	0	1	0	1
B (lineage not determined)	3	1	1	0	1	6
Total	3	1	1	1	2	8

In addition, 248 swabs were received by virology laboratories from non-sentinel surveillance. Of these, 97 influenza viruses were identified: B (lineage not determined) (42), A(H3N2) (30), A (not sub-typed) (11), A(H1N1)pdm09 (7), B/Wisconsin/1/2010-like (5), and A/Victoria/361/2011 (H3N2) (2). The distribution by DHB is shown in Table 2.

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

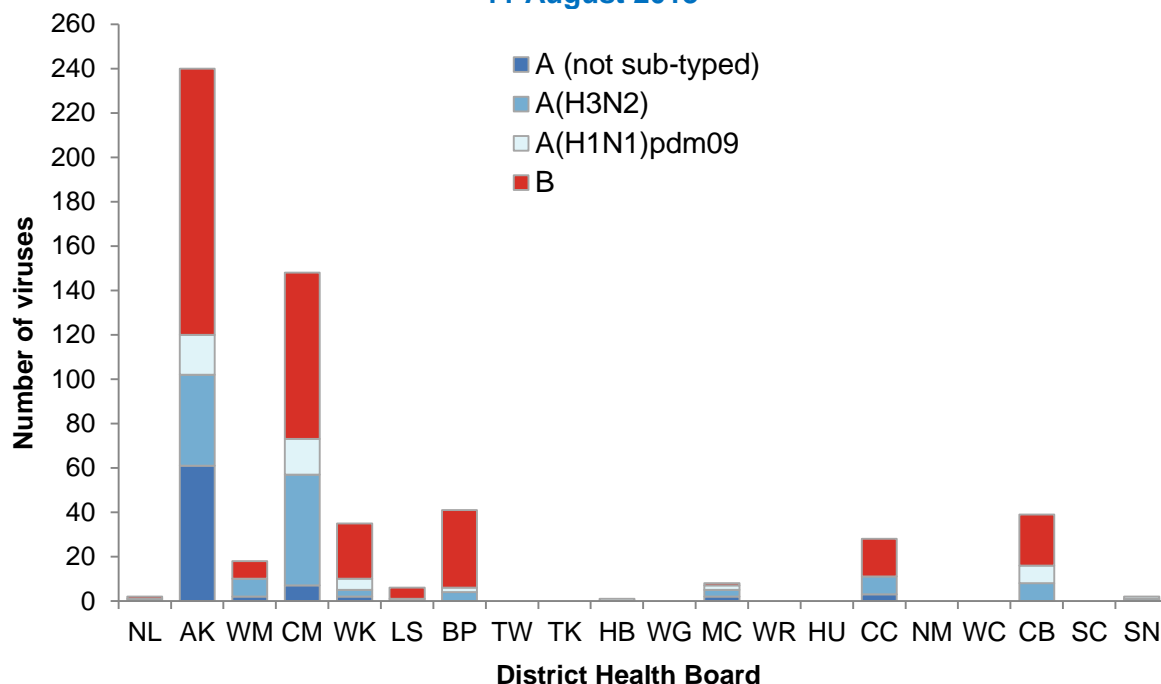
Antigenic strain	DHB									Total
	WM	AK	CM	WK	LS	BP	MC	CC	CB	
A (not sub-typed)	0	10	0	1	0	0	0	0	0	11
A(H1N1)pdm09	0	4	1	1	0	0	0	0	1	7
A(H3N2)	2	12	14	1	0	0	0	0	1	30
A/Victoria/361/2011 (H3N2)	0	0	0	0	0	2	0	0	0	2
B (lineage not determined)	2	21	9	3	1	1	1	2	2	42
B/Wisconsin/1/2010-like	0	0	0	0	0	5	0	0	0	5
Total	4	47	24	6	1	8	1	2	4	97

Figure 4 shows the cumulative total of influenza viruses confirmed (sentinel and non-sentinel surveillance) from week 1 to the end of week 32 (11 August 2013). A total of 568 influenza viruses were identified: B (310) including 77 B/Wisconsin/1/2010-like viruses and three of B/Brisbane/60/2008-like, A(H3N2) (127) including 25 A/Victoria/361/2011 (H3N2)-like viruses, A (not sub-typed) (77), and A(H1N1)pdm09 (54) including 19 A/California/7/2009 (H1N1)-like viruses.

The 2013 southern hemisphere winter influenza vaccine has the following composition: A/California/7/2009(H1N1)-like, A/Victoria/361/2011(H3N2)-like and B/Wisconsin/1/2010-like strains.

*Note: A/California/7/2009 is an influenza A(H1N1)pdm09 strain

Figure 4. Cumulative laboratory-confirmed viruses by DHB from week 1 to week 32, 11 August 2013



Antiviral susceptibility monitoring, WHO National Influenza Centre, Institute of Environmental Science and Research (ESR)

From 1 January–13 August 2013, antiviral susceptibility testing were conducted: 171 influenza viruses (25 A(H1N1)pdm09, 33 A(H3N2) and 113 influenza B) were tested for the neuraminidase inhibitor oseltamivir (Tamiflu) and none of them showed resistance to oseltamivir. In addition, 189 influenza viruses (28 A(H1N1)pdm09, 41 A(H3N2) and 120 influenza B) for the neuraminidase inhibitor zanamivir (Relenza) and none of them showed resistance to zanamivir.

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