

INFLUENZA WEEKLY UPDATE

2013/39: 23–29 September 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 39 (23–29 September 2013).

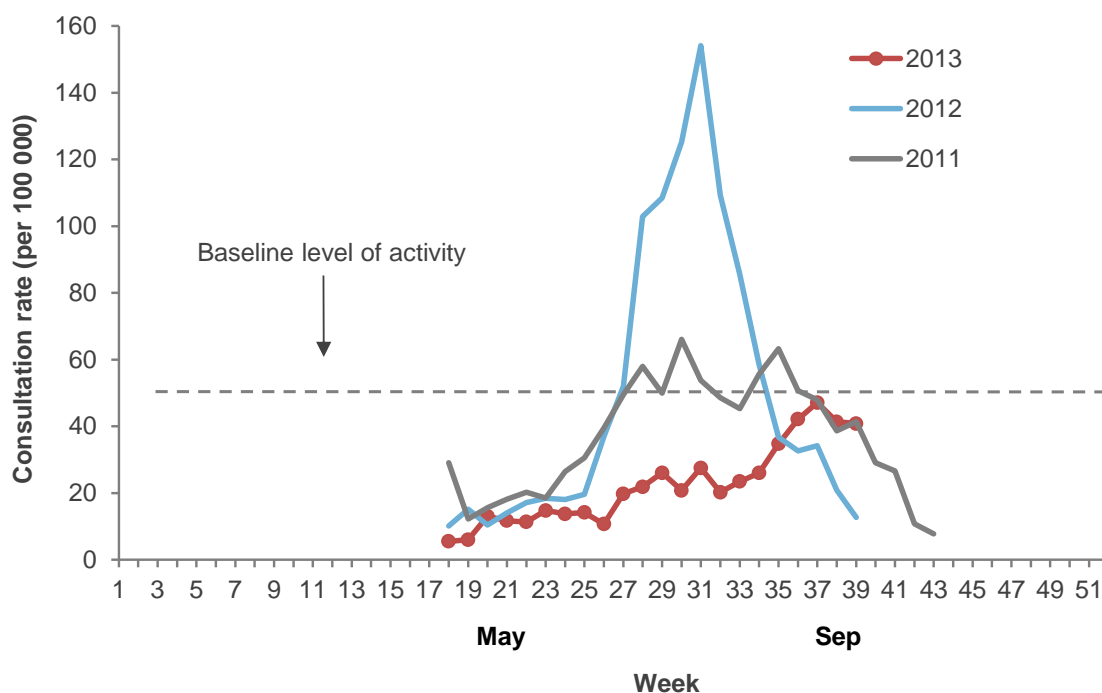
Summary

- Influenza-like illness (ILI) through sentinel surveillance was reported from 17 out of 20 District Health Boards (DHB) with a national consultation rate of 40.8 per 100 000 (148 ILI consultations).
- A total of 402 swabs were received from sentinel (21) and non-sentinel (381) surveillance.
- 193 influenza viruses were identified: B (62) including three B/Wisconsin/1/2010-like viruses, A (not sub-typed) (69), A(H3N2) (35) including three A/Victoria/361/2011 (H3N2), and A(H1N1)pdm09 (27).

INFLUENZA-LIKE ILLNESS SURVEILLANCE

In the past week, a total of 148 consultations for influenza-like illness were reported from 66 general practices in 17 out of 20 DHBs. This gives a weekly consultation rate of 40.8 per 100 000 patient population. Figure 1 shows the weekly national consultation rates for the 2011 and 2012 seasons, and 2013 so far. The current rate of influenza-like illness is below the baseline level.

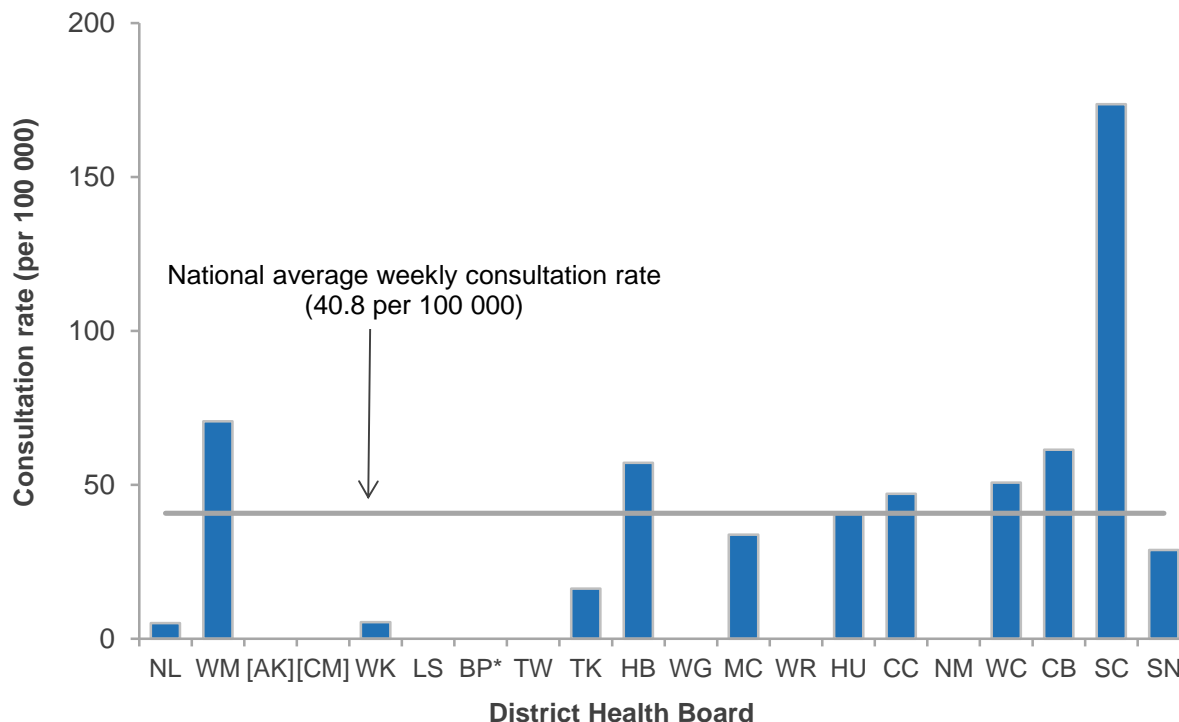
Figure 1. Weekly consultation rates for influenza-like illness in New Zealand, 2011, 2012 and 2013



* 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 (173.7 per 100 000, 12 cases), followed by Waitemata (70.7 per 100 000, 9 cases), and Hawke’s Bay (57.2 per 100 000, 11 cases) DHBs.

Figure 2. Weekly consultation rates for influenza-like illness by DHB for week 39 (23–29 September 2013)



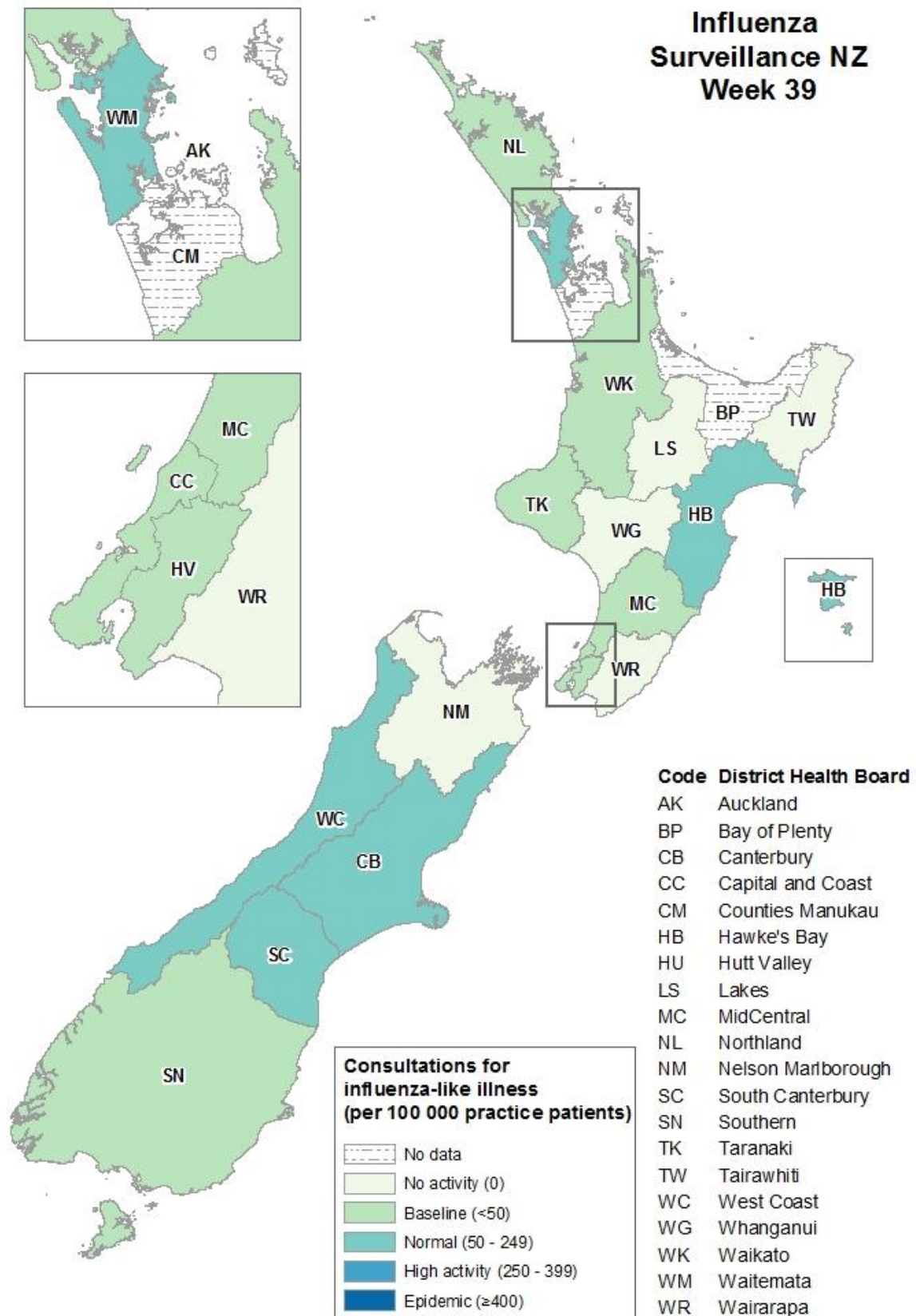
*Did not participate for the week.

[] 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 39 were 131.5 per 100 000 and 18.3 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 39 (23–29 September 2013)



VIROLOGICAL SURVEILLANCE

A total of 21 swabs were received by virology laboratories from sentinel surveillance in week 39. From these 13 viruses were identified (Figure 4): B (lineage not determined) (6), A(H1N1)pdm09 (3), A(H3N2) (2), and A (not sub-typed) (2). The distribution by DHB is shown in Table 1.

Figure 4. Total influenza viruses from sentinel surveillance by type and week reported, weeks 18–39 (29 April–29 September 2013)

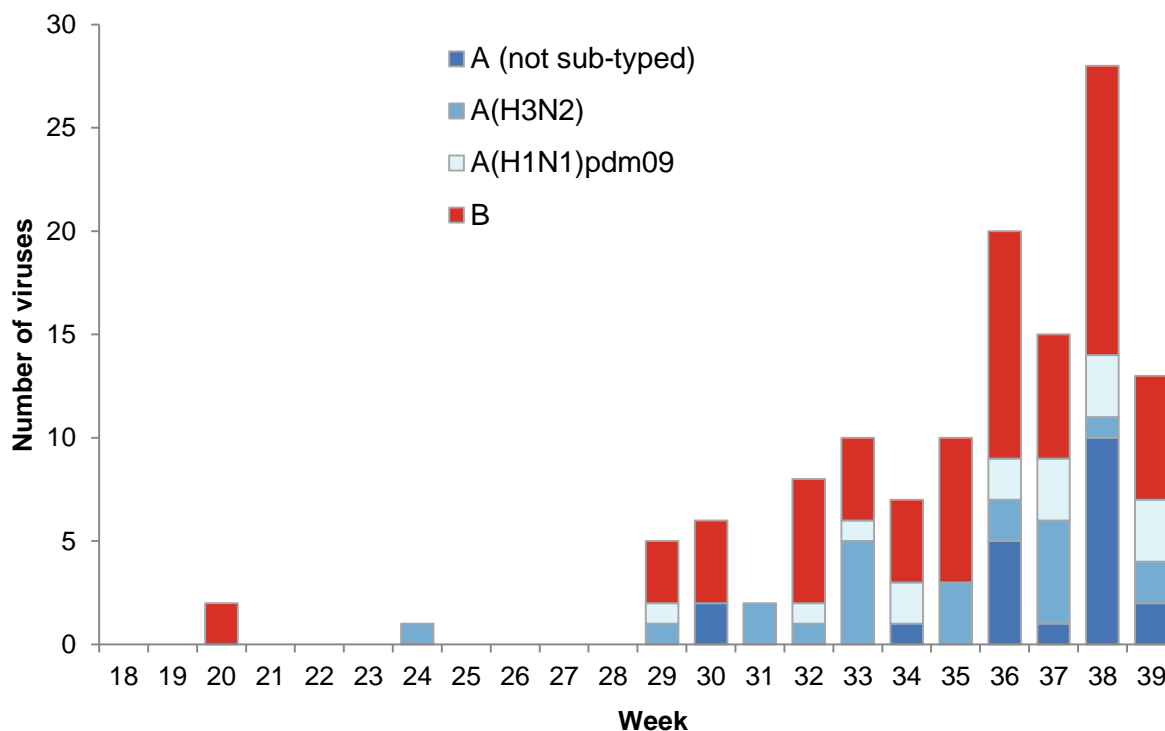


Table 1. Influenza viruses from sentinel surveillance by DHB for week 39 (23–29 September 2013)

Influenza virus	DHB						Total
	TK	MC	CC	NM	CB	SN	
A (not sub-typed)			1	1			2
A(H1N1)pdm09					3		3
A(H3N2)					2		2
B (lineage not determined)	1	1	1		2	1	6
Total	1	1	2	1	7	1	13

In addition, 381 swabs were received by virology laboratories from non-sentinel surveillance in week 39. From these, 180 influenza viruses were identified (Figure 5): A (not sub-typed) (67), B (lineage not determined) (53), A(H3N2) (30), A(H1N1)pdm09 (24), A/Victoria/361/2011 (H3N2) (3), and B/Wisconsin/1/2010-like (3). The distribution by DHB is shown in Table 2.

Figure 5. Total influenza viruses from non-sentinel surveillance by type and week reported for weeks 18–39 (29 April–29 September 2013)

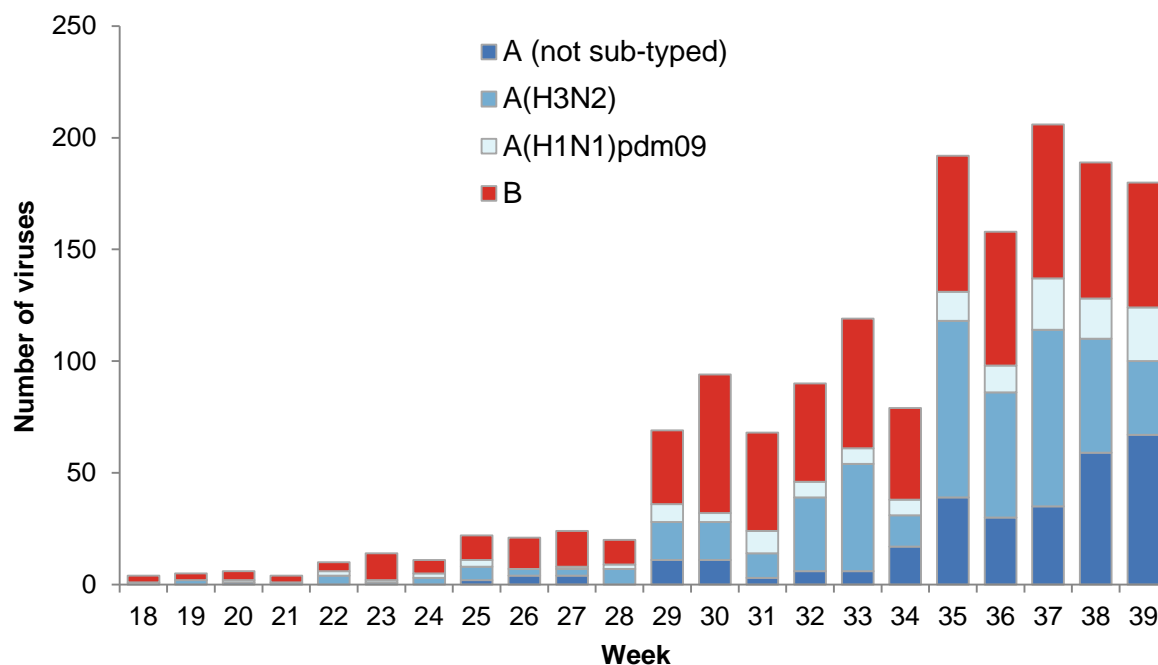
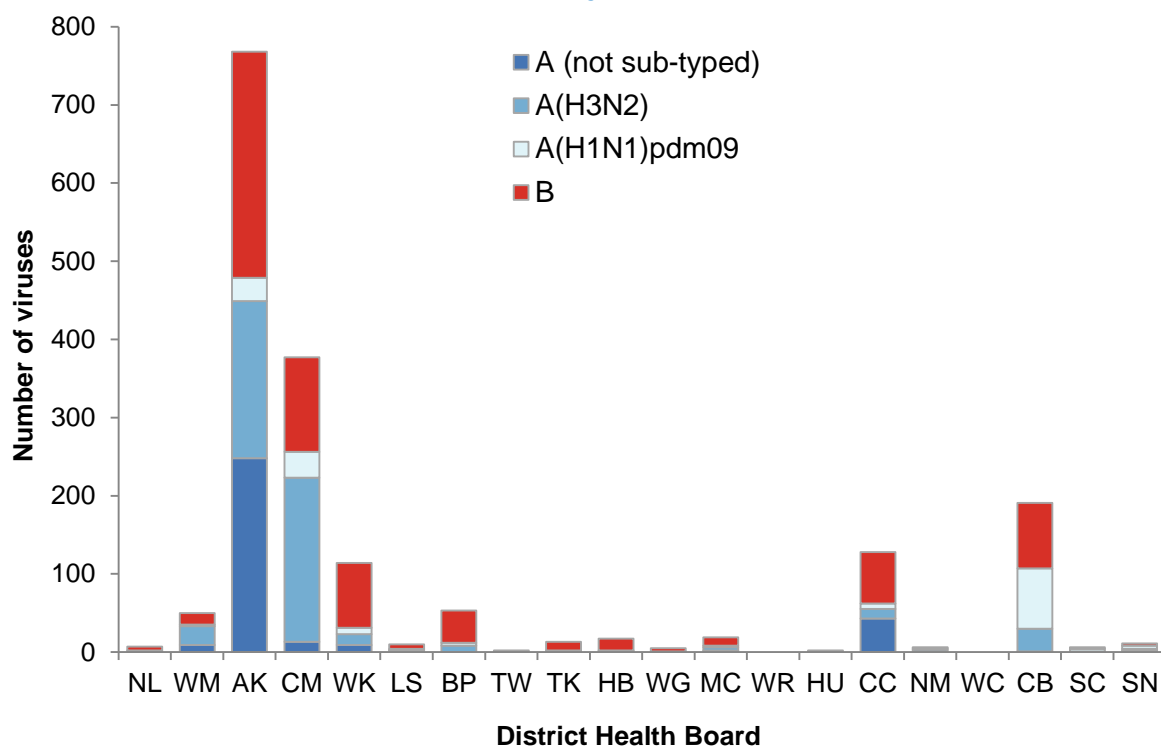


Table 2. Influenza viruses from non-sentinel surveillance by DHB for week 39 (23–29 September 2013)

Influenza virus	DHB													Total
	WM	AK	CM	WK	BP	TK	HB	MC	CC	NM	CB	SC	SN	
A (not sub-typed)		48		2					16		1			67
A(H1N1)pdm09		1	1						1		20		1	24
A(H3N2)	1	5	16		1					1	6			30
A/Victoria/361/2011 (H3N2)			3											3
B (lineage not determined)		19	3	6		1	4	1	5		13	1		53
B/Wisconsin/1/2010-like			1	1	1									3
Total	1	73	24	9	2	1	4	1	22	1	40	1	1	180

Figure 6 shows the cumulative total of influenza viruses confirmed (sentinel and non-sentinel surveillance) from week 1 to the end of week 39 (29 September 2013). A total of 1779 influenza viruses were identified: B (759) including 194 B/Wisconsin/1/2010-like and five B/Brisbane/60/2008-like viruses, A(H3N2) (512) including 154 A/Victoria/361/2011 (H3N2)-like viruses, A (not sub-typed) (336), and A(H1N1)pdm09 (172) including 31 A/California/7/2009 (H1N1)-like viruses.

Figure 6. Cumulative laboratory-confirmed viruses by DHB for weeks 1–39 (1 January–29 September 2013)



The 2013 southern hemisphere 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.