

INFLUENZA WEEKLY UPDATE

2015/18: 27 April – 3 May 2015

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 18 (27 April – 3 May 2015).

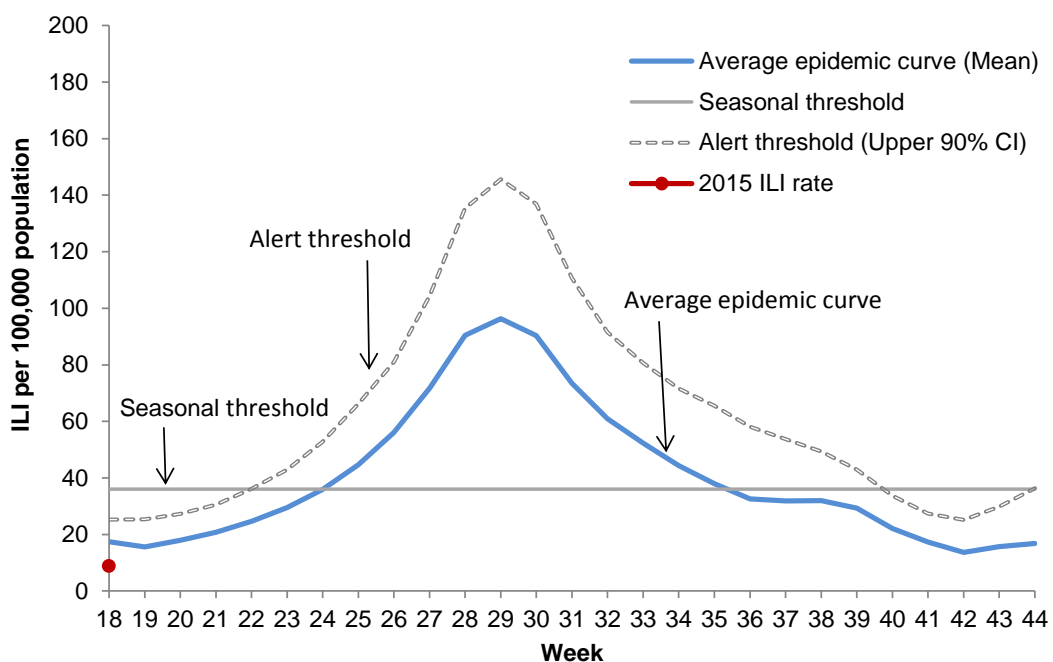
Summary

- ILI through sentinel surveillance was reported from 14 out of 20 District Health Boards (DHB) with a national consultation rate of 8.8 per 100 000 (23 ILI consultations).
- A total of 187 swabs were received from sentinel (9) and non-sentinel (178) surveillance.
- Nine influenza viruses were identified: A(H3N2) (5) including one A/Texas/50/2012-like, B (2) including one B/Massachusetts/02/2012-like, and A (not sub-typed) (2).

INFLUENZA-LIKE ILLNESS SURVEILLANCE

In the past week, a total of 23 consultations for influenza-like illness were reported from 47 general practices in 14 out of 20 DHBs. This gives a weekly consultation rate of 8.8 per 100,000 patient population. Figure 1 shows the weekly national consultation rate for 2015 in comparison to the average epidemic curve in 2000–2013 (excluding 2009). For more details on threshold definitions, see Appendix. The current rate of influenza-like illness is below the seasonal threshold.

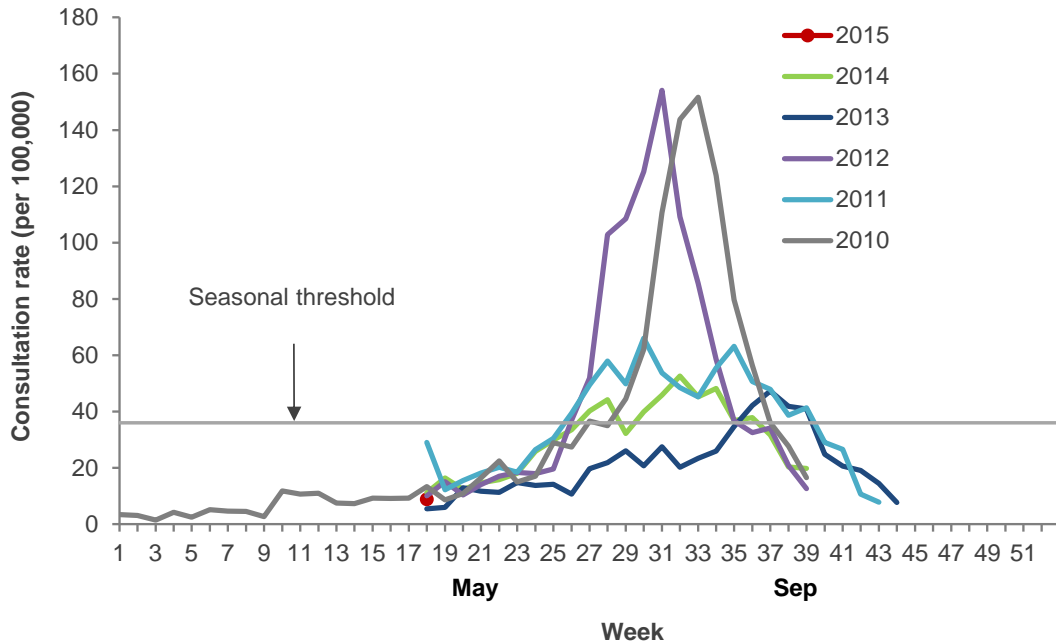
Figure 1: Weekly consultation rates for influenza-like illness in New Zealand in 2015 in comparison to the average epidemic curve in 2000–2013 (excluding 2009)



Note: There is only one value for 2015 (8.8 per 100,000).

Figure 2 shows the weekly national consultation rate for 2015 in comparison to the previous years 2010–2014.

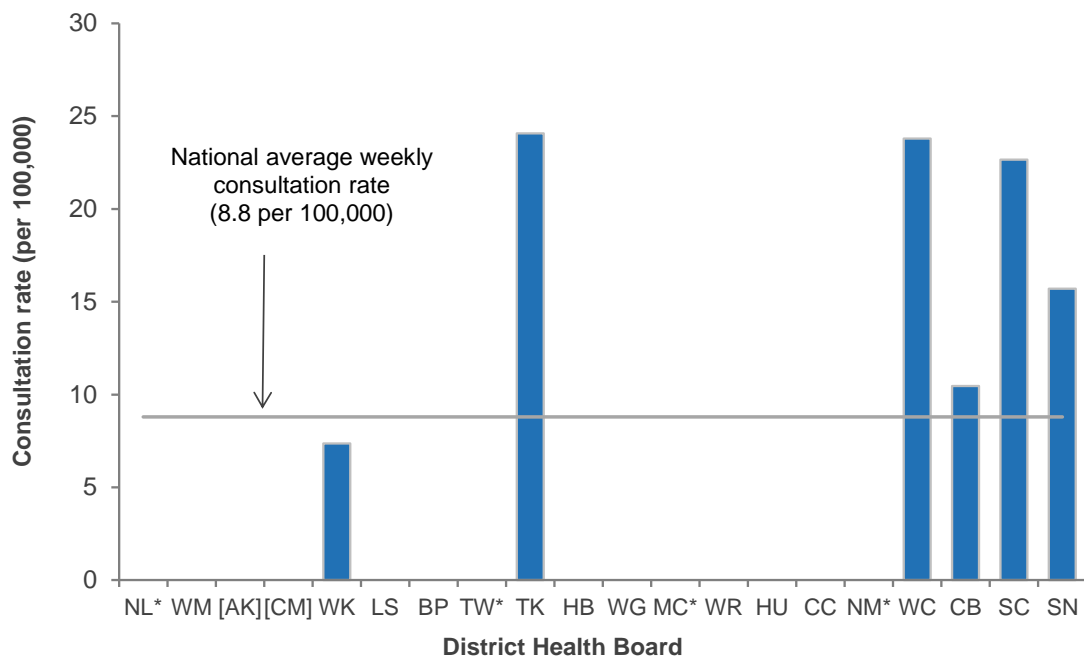
Figure 2. Weekly consultation rates for influenza-like illness in New Zealand, 2010–2015



Note: There is only one value for 2015 (8.8 per 100,000).

Figure 3 compares the consultation rates for influenza-like illness for each DHB over the past week. Taranaki DHB had the highest consultation rate (24.1 per 100,000, 5 cases) followed by West Coast (23.8 per 100,000, 3 cases) and South Canterbury (22.7 per 100,000, 1 case).

Figure 3: Weekly consultation rates for influenza-like illness by DHB week ending 3 May 2015



* No data for the week.

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. For more details, please refer to the website: <http://www.esr.cri.nz/competencies/shivers/Pages/SHIVERSReports.aspx>

VIROLOGICAL SURVEILLANCE

A total of nine swabs were received from sentinel surveillance. No influenza viruses were identified.

In addition, 178 swabs were received by virology laboratories from non-sentinel surveillance. Of these, nine influenza viruses were identified: A(H3N2) (5) including one A/Texas/50/2012-like, B (2) including one B/Massachusetts/02/2012-like, and A (not sub-typed) (2). The distribution by DHB is shown in Table 1.

Table 1. Influenza viruses from non-sentinel surveillance for week 18 by DHB

Antigenic strain	DHB					Total
	AK	CM	WK	CB	SC	
A (not sub-typed)	1	0	1	0	0	2
A(H3N2)	0	0	0	1	3	4
A/Texas/50/2012 (H3N2)-like	0	1	0	0	0	1
B (not antigenically typed)	1	0	0	0	0	1
B/Massachusetts/02/2012-like	0	1	0	0	0	1
Total	2	2	1	1	3	9

Table 2. DHB codes and descriptions

DHB code	DHB	DHB code	DHB
NL	Northland	WG	Whanganui
WM	Waitemata	MC	MidCentral
AK	Auckland	WR	Wairarapa
CM	Counties Manukau	HU	Hutt Valley
WK	Waikato	CC	Capital & Coast
LS	Lakes	NM	Nelson Marlborough
BP	Bay of Plenty	WC	West Coast
TW	Tairāwhiti	CB	Canterbury
TK	Taranaki	SC	South Canterbury
HB	Hawke's Bay	SN	Southern

APPENDIX

* New Zealand's ILI data during 2000–2013 (excluding 2009) was reviewed and updated:

- The average epidemic curve indicated here is the usual level of influenza activity that may occur during a typical year using the method described in “*Global epidemiological surveillance standards for influenza*” (http://www.who.int/influenza/resources/documents/WHO_Epidemiological_Influenza_Surveillance_Standards_2014.pdf).
- The seasonal threshold indicated here is the level of influenza activity that signals the start and end of the annual influenza season and it was based on the Moving Epidemic Method (Vega et al. *Influenza and other respiratory viruses* 2013;7(4):546-558). A weekly rate of 36 ILI consultations per 100,000 patient population is considered the seasonal threshold.
- Alert threshold (defined as 90% upper confidence interval) indicated here is a level above which, varying by time of year, influenza activity is higher than most years.
- The ILI rates used here to describe different level of influenza activity is based on the 25th and 75th percentiles of the ILI data. A rate of 37–149 per 100,000 patient population is considered indicative of normal seasonal influenza activity; a rate of 150–399 indicative of higher than expected influenza activity; a rate of ≥ 400 indicative of a severe epidemic level of influenza activity.

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