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 23 (4 – 10 June 2012).

Summary
Influenza-like illness (ILI) through sentinel surveillance was reported from 19 out of 20 District Health Boards (DHB) with a national consultation rate of 18.4 per 100,000 (69 ILI consultations). Two hundred and twenty-five swabs were received from sentinel (18) and non-sentinel (207) surveillance. Eight viruses were identified: A(H3N2) (3), A(H1N1)pdm09 (2), B (Lineage not determined) (2), and A (Not subtyped) (1).

INFLUENZA-LIKE ILLNESS SURVEILLANCE

In the past week, a total of 69 consultations for influenza-like illness were reported from 81 general practices in 19 out of 20 DHBs. This gives a weekly consultation rate of 18.4 per 100,000 patient population. Figure 1 shows the weekly national consultation rates for 2010, 2011 seasons, and 2012 to date. The current rate of influenza-like illness is below the baseline.

Figure 1: Weekly consultation rates for influenza-like illness in New Zealand, 2010, 2011 and 2012

* 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 (51.9 per 100 000, 4 cases), followed by Auckland (40.9 per 100 000, 9 cases) and MidCentral (29.0 per 100 000, 6 cases).

Figure 2: Weekly consultation rates for influenza-like illness by DHB week ending 10 June 2012

[ ] Not participating in the influenza surveillance
Figure 3: Consultation rates for influenza-like illness mapped by DHB for week 23, 2012

Consultations for influenza-like illness (per 100,000 practice patients)

No data
No activity (0)
Baseline (<50)
Normal (50 - 249)
High activity (250 - 399)
Epidemic (≥400)

Influenza Surveillance NZ
Week 23

Code District Health Board
AK Auckland
BP Bay of Plenty
CB Canterbury
CC Capital and Coast
CM Counties Manukau
HB Hawke’s Bay
HU Hutt Valley
LS Lakes
MC MidCentral
NL Northland
NM Nelson Marlborough
SC South Canterbury
SN Southern
TK Taranaki
TW Tairawhiti
WC West Coast
WG Whanganui
WK Waikato
WM Waitemata
WR Wairarapa
VIROLOGICAL SURVEILLANCE

A total of 18 swabs were received by virology laboratories from sentinel surveillance. Of these, four viruses were identified (Figure 4): A(H3N2) (2) from Canterbury, A(H1N1)pdm09 (1) from Waikato and A (Not subtyped) from Taranaki DHBs.

Figure 4: Total influenza viruses from sentinel surveillance by type and week reported, week 18–23 and the total percentage positive from the swabs received

In addition, 207 swabs were received by virology laboratories from non-sentinel surveillance. Of these, four viruses were identified (Figure 5), one A(H3N2) from Canterbury and three from Counties Manukau: B (Lineage not determined) (2) and A(H1N1)pdm09 (1).

Figure 5: Total influenza viruses from non-sentinel surveillance by type and week reported, week 18–23 and the total percentage positive from the swabs received
Figure 6 shows the cumulative total of influenza viruses confirmed (sentinel and non-sentinel surveillance) from week 1 to the end of week 23 (10 June 2012). A total of 58 influenza viruses were identified: influenza B (23) including four of B/Brisbane/60/2008-like (belonging to the B/Victoria lineage) and two B/Wisconsin/1/2010-like viruses (belonging to the B/Yamagata lineage), A(H3N2) (24) including three A/Perth/16/2009 (H3N2)-like viruses, A(H1N1)pdm09 (6) including one A/California/7/2009 (H1N1)-like virus, and A (Not subtyped) (5). The 2012 southern hemisphere winter influenza vaccine has the following composition: A/California/7/2009(H1N1)-like, A/Perth/16/2009(H3N2)-like and B/Brisbane/60/2008-like strains.

Figure 6: Cumulative laboratory-confirmed viruses by DHB from week 1 to week 23, 10 June 2012