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 24 (11 – 17 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 18.0 per 100 000 (66 ILI consultations). Two hundred and fifty-five swabs were received from sentinel (26) and non-sentinel (229) surveillance. Twenty-three viruses were identified: A(H3N2) (10), A(H1N1)pdm09 (6), B (Lineage not determined) (3), A (Not subtyped) (3) and B/Wisconsin/1/2010-like (1).

**INFLUENZA-LIKE ILLNESS SURVEILLANCE**

In the past week, a total of 66 consultations for influenza-like illness were reported from 81 general practices in 19 out of 20 DHBs. This gives a weekly consultation rate of 18.0 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.

* 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. Auckland DHB had the highest consultation rate (52.9 per 100 000, 11 cases), followed by Lakes (48.5 per 100 000, 2 cases) and Taranaki (30.8 per 100 000, 9 cases).

Figure 2: Weekly consultation rates for influenza-like illness by DHB week ending 17 June 2012

[ ] Not participating in the influenza surveillance
Figure 3: Consultation rates for influenza-like illness mapped by DHB for week 24, 2012.

Influenza Surveillance NZ
Week 24

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)

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 26 swabs were received by virology laboratories from sentinel surveillance. Of these, two A(H3N2) viruses were identified (Figure 4) from Canterbury DHB.

Figure 4: Total influenza viruses from sentinel surveillance by type and week reported, week 18–24 and the total percentage positive from the swabs received

In addition, 229 swabs were received by virology laboratories from non-sentinel surveillance. Of these, 21 viruses were identified (Figure 5): A(H3N2) (8), A(H1N1)pdm09 (6), B (Lineage not determined) (3), A (Not subtyped) (3) and B/Wisconsin/1/2010-like (1). The distribution by DHB is shown in Table 1.

Table 1: Influenza viruses from non-sentinel surveillance for week 24 by DHB

<table>
<thead>
<tr>
<th>Antigenic Strain</th>
<th>AK</th>
<th>CM</th>
<th>WK</th>
<th>CC</th>
<th>NM</th>
<th>CB</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A (Not subtyped)</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>A(H1N1)pdm09</td>
<td>0</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>A(H3N2)</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>B (Lineage not determined)</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>B/Wisconsin/1/2010-like</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3</strong></td>
<td><strong>12</strong></td>
<td><strong>1</strong></td>
<td><strong>1</strong></td>
<td><strong>1</strong></td>
<td><strong>3</strong></td>
<td><strong>21</strong></td>
</tr>
</tbody>
</table>
Figure 6 shows the cumulative total of influenza viruses confirmed (sentinel and non-sentinel surveillance) from week 1 to the end of week 24 (17 June 2012). A total of 81 influenza viruses were identified: influenza B (27) including four of B/Brisbane/60/2008-like (belonging to the B/Victoria lineage) and three B/Wisconsin/1/2010-like viruses (belonging to the B/Yamagata lineage), A(H3N2) (34) including three A/Perth/16/2009 (H3N2)-like viruses, A(H1N1)pdm09 (12) including one A/California/7/2009 (H1N1)-like virus, and A (Not subtyped) (8). 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 24, 17 June 2012