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 25 (18 – 24 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 19.6 per 100 000 (76 ILI consultations). Two hundred and fifty-six swabs were received from sentinel (23) and non-sentinel (233) surveillance. Fifty viruses were identified: A(H3N2) (16), A (Not subtyped) (11), B (Lineage not determined) (9), A(H1N1)pdm09 (8), A/Perth/16/2009 (H3N2)-like (4), A/California/7/2009 (H1N1)-like (1), and B/Wisconsin/1/2010-like (1).

INFLUENZA-LIKE ILLNESS SURVEILLANCE

In the past week, a total of 76 consultations for influenza-like illness were reported from 83 general practices in 19 out of 20 DHBs. This gives a weekly consultation rate of 19.6 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. Waitemata DHB had the highest consultation rate (110.6 per 100,000, 10 cases), followed by Auckland (81.8 per 100,000, 18 cases) and Capital and Coast (36.3 per 100,000, 8 cases).

Figure 2: Weekly consultation rates for influenza-like illness by DHB
week ending 24 June 2012

[ ] Not participating in the influenza surveillance
Figure 3: Consultation rates for influenza-like illness mapped by DHB for week 25, 2012
A total of 23 swabs were received by virology laboratories from sentinel surveillance. Of these, two viruses were identified (Figure 4): A(H3N2) from Canterbury and A/Perth/16/2009 (H3N2)-like from Taranaki DHBs.

In addition, 233 swabs were received by virology laboratories from non-sentinel surveillance. Of these, 48 viruses were identified (Figure 5): A(H3N2) (15), A (Not subtyped) (11), B (Lineage not determined) (9), A(H1N1)pdm09 (8), A/Perth/16/2009 (H3N2)-like (3), A/California/7/2009 (H1N1)-like (1), and B/Wisconsin/1/2010-like (1). The distribution by DHB is shown in Table 1.

<table>
<thead>
<tr>
<th>Antigenic Strain</th>
<th>AK</th>
<th>CM</th>
<th>WK</th>
<th>TK</th>
<th>CC</th>
<th>NM</th>
<th>CB</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td>A (Not subtyped)</td>
<td>6</td>
<td>3</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>11</td>
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<td>A(H3N2)</td>
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<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>11</td>
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<tr>
<td>A/Perth/16/2009 (H3N2)-like</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>A/California/7/2009 (H1N1)-like</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<td>1</td>
</tr>
<tr>
<td>A(H1N1)pdm09</td>
<td>0</td>
<td>7</td>
<td>0</td>
<td>0</td>
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<td>0</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>B (Lineage not determined)</td>
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<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>B/Wisconsin/1/2010-like</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>8</strong></td>
<td><strong>17</strong></td>
<td><strong>1</strong></td>
<td><strong>1</strong></td>
<td><strong>3</strong></td>
<td><strong>1</strong></td>
<td><strong>17</strong></td>
<td><strong>48</strong></td>
</tr>
</tbody>
</table>
Figure 5: Total influenza viruses from non-sentinel surveillance by type and week reported, week 18–25 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 25 (24 June 2012). A total of 131 influenza viruses were identified: influenza A(H3N2) (55) including eight A/Perth/16/2009 (H3N2)-like viruses, B (37) including four of B/Brisbane/60/2008-like (belonging to the B/Victoria lineage) and four B/Wisconsin/1/2010-like viruses (belonging to the B/Yamagata lineage), A(H1N1)pdm09 (21) including two A/California/7/2009 (H1N1)-like virus, and A (Not subtyped) (18).

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 25, 24 June 2012

- A (Not subtyped)
- A(H3)
- A(H1N1)pdm09
- B (Lineage not determined)
- B (Victoria lineage)
- B (Yamagata lineage)

District Health Board

Number of viruses

NL, WM, AK, CM, WK, LS, BP, TW, TK, HB, WG, MC, WR, HU, CC, NM, WC, CB, SC, SN