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 31 (1 – 7 August 2011).

**SUMMARY OF THIS REPORT:**

Influenza-like illness (ILI) through sentinel surveillance was reported in all 20 District Health Boards (DHB) with a national consultation rate of 53.8 per 100 000 (212 ILI consultations). Three hundred and twenty-five swabs were received from sentinel (52) and non-sentinel surveillance (273). Sixty-six viruses were identified from sentinel (26) and non-sentinel surveillance (40): B (38), A(H3N2) (12), A (not sub-typed) (11) and pandemic A(H1N1) 09 (5).

**INFLUENZA-LIKE ILLNESS SURVEILLANCE**

In the past week, a total of 212 consultations for influenza-like illness were reported from 87 general practices in all 20 DHBs. This gives a weekly consultation rate of 53.8 per 100 000 patient population. Figure 1 shows the weekly national consultation rates for 2009, 2010 seasons, and 2011 so far. The current rate of influenza-like illness is above 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 (113.7 per 100,000, 12 cases) had the highest consultation rate, followed by West Coast (98.6 per 100,000, 17 cases) and Hutt Valley (83.9 per 100,000, 29 cases).

Figure 2: Weekly consultation rates for influenza-like illness by DHB week ending 7 August 2011

District Health Board

National average weekly consultation rate (53.8 per 100,000)
Figure 3 maps the consultation rates for influenza-like illness by DHB.

**Figure 3: Consultation rates for influenza-like illness mapped by DHB for week 31, 2011**

---

**Influenza Surveillance NZ**  
**Week 31**

**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 52 swabs were received by virology laboratories from sentinel surveillance. Of these, 26 viruses were identified: B (17), A(H3N2) (5) and A (not sub-typed) (4). The distribution by DHB is shown in Table 1.

Table 1: Influenza viruses from sentinel surveillance for week 31 by DHB

<table>
<thead>
<tr>
<th>Antigenic Strain</th>
<th>AK</th>
<th>WK</th>
<th>TK</th>
<th>HB</th>
<th>MC</th>
<th>CC</th>
<th>NM</th>
<th>CB</th>
<th>SC</th>
<th>SN</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A (not sub-typed)</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>A(H3N2)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>B</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>17</td>
</tr>
<tr>
<td>Total</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>6</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>26</td>
</tr>
</tbody>
</table>

Figure 4: Total influenza viruses from sentinel surveillance by type and week reported, weeks 18–31 and the total percentage positive from the swabs received

In addition, 273 swabs were received by virology laboratories from non-sentinel surveillance. Of these, 40 viruses were identified: B (21), A(H3N2) (7), A (not sub-typed) (7) and pandemic A(H1N1) 09 (5) (Figure 5). The distribution by DHB is shown in Table 2.

Table 2: Influenza viruses from non-sentinel surveillance for week 31 by DHB

<table>
<thead>
<tr>
<th>Antigenic Strain</th>
<th>WM</th>
<th>AK</th>
<th>CM</th>
<th>WK</th>
<th>MC</th>
<th>CC</th>
<th>WC</th>
<th>CB</th>
<th>SN</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A (not sub-typed)</td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>A(H3N2)</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>B</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>6</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>21</td>
</tr>
<tr>
<td>Pandemic A(H1N1) 09</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>1</td>
<td>5</td>
<td>11</td>
<td>6</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>8</td>
<td>2</td>
<td>40</td>
</tr>
</tbody>
</table>
Figures 5 and 6 show the cumulative total of influenza viruses confirmed (sentinel and non-sentinel surveillance) from week 1 to the end of week 31 (7 August 2011). A total of 491 influenza viruses were identified: influenza B (313) including 102 of B/Brisbane/60/2008-like viruses and one B/Florida/4/2006-like virus, pandemic (H1N1) 09 (42) including four A/California/7/2009 (H1N1)-like viruses, A (H3N2) (84) including 21 A/Perth/16/2009 (H3N2)-like virus, and A (not sub-typed) (52). The major circulating influenza strains (B/Brisbane/60/2008-like, A/California/7/2009 (H1N1)-like and A/Perth/16/2009 (H3N2)-like strains) are covered by the 2011 influenza vaccine.