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 33 (12–18 August 2013).

**Summary**
- ILI through sentinel surveillance was reported from 18 out of 20 District Health Boards (DHB) with a national consultation rate of 23.4 per 100,000 (84 ILI consultations).
- A total of 349 swabs were received from sentinel (31) and non-sentinel (318) surveillance.
- 136 influenza viruses were identified: B (lineage not determined) (64), A(H3N2) (51), A (not sub-typed) (12), and A(H1N1)pdm09 (9).

**INFLUENZA-LIKE ILLNESS SURVEILLANCE**

In the past week, a total of 84 consultations for influenza-like illness were reported from 64 general practices in 18 out of 20 DHBs. This gives a weekly consultation rate of 23.4 per 100,000 patient population. Figure 1 shows the weekly national consultation rates for 2011, 2012 seasons, and 2013 so far. 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. Whanganui DHB had the highest consultation rate (84.6 per 100 000, 4 cases), followed by Lakes (72.4 per 100 000, 1 case), and Capital & Coast (50.2 per 100 000, 16 cases).

Figure 2. Weekly consultation rates for influenza-like illness by DHB
week ending 18 August 2013

[ ] Not participating in the influenza sentinel surveillance.

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. Based on the SHIVERS weekly report, the ILI incidence for Auckland and Counties Manukau DHBs for week 33 were 153.2 per 100 000 and 18.3 per 100 000 patient populations, respectively. For more details, please refer to the website:
http://www.esr.cri.nz/competencies/shivers/Pages/SHIVERSReports.aspx
Figure 3. Consultation rates for influenza-like illness mapped by DHB for week 33, 2013

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 | Tararaki
TW | Tairawhiti
WC | West Coast
WG | Whanganui
WK | Waikato
WM | Waitemata
WR | Wairarapa
VIROLOGICAL SURVEILLANCE

A total of 31 swabs were received by virology laboratories from sentinel surveillance. Of these 12 viruses were identified (Figure 4): B (lineage not determined) (5), A(H3N2) (3), A(H1N1)pdm09 (2), and A (not sub-typed) (2). The distribution by DHB is shown in Table 1.

<table>
<thead>
<tr>
<th>Antigenic strain</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A (not sub-typed)</td>
<td></td>
</tr>
<tr>
<td>A(H1N1)pdm09</td>
<td></td>
</tr>
<tr>
<td>A(H3N2)</td>
<td></td>
</tr>
<tr>
<td>B (lineage not determined)</td>
<td></td>
</tr>
</tbody>
</table>

Table 1. Influenza viruses from sentinel surveillance for week 33 by DHB

<table>
<thead>
<tr>
<th>Antigenic strain</th>
<th>NL</th>
<th>WM</th>
<th>WK</th>
<th>TK</th>
<th>WG</th>
<th>CC</th>
<th>CB</th>
<th>SN</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A (not sub-typed)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>A(H1N1)pdm09</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>A(H3N2)</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>B (lineage not determined)</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>12</td>
</tr>
</tbody>
</table>

Figure 4. Total influenza viruses from sentinel surveillance by type and week reported, week 18–33

In addition, 318 swabs were received by virology laboratories from non-sentinel surveillance. Of these, 124 influenza viruses were identified (Figure 5): B (lineage not determined) (59), A(H3N2) (48), A (not sub-typed) (10), and A(H1N1)pdm09 (7). The distribution by DHB is shown in Table 2.

<table>
<thead>
<tr>
<th>Antigenic strain</th>
<th>WM</th>
<th>AK</th>
<th>CM</th>
<th>WK</th>
<th>LS</th>
<th>BP</th>
<th>CC</th>
<th>CB</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A (not sub-typed)</td>
<td>0</td>
<td>9</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>A(H1N1)pdm09</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>A(H3N2)</td>
<td>3</td>
<td>22</td>
<td>22</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>48</td>
</tr>
<tr>
<td>B (lineage not determined)</td>
<td>1</td>
<td>24</td>
<td>18</td>
<td>5</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>3</td>
<td>59</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>5</td>
<td>55</td>
<td>42</td>
<td>8</td>
<td>1</td>
<td>2</td>
<td>6</td>
<td>5</td>
<td>124</td>
</tr>
</tbody>
</table>
Figure 5. Total influenza viruses from non-sentinel surveillance by type and week reported, week 18–33

Figure 6 shows the cumulative total of influenza viruses confirmed (sentinel and non-sentinel surveillance) from week 1 to the end of week 33 (18 August 2013). A total of 704 influenza viruses were identified: B (373) including 77 B/Wisconsin/1/2010-like viruses and three of B/Brisbane/60/2008-like, A(H3N2) (178) including 26 A/Victoria/361/2011 (H3N2)-like viruses, A (not sub-typed) (89), and A(H1N1)pdm09 (64) including 22 A/California/7/2009 (H1N1)-like viruses.

The 2013 southern hemisphere winter influenza vaccine has the following composition: A/California/7/2009(H1N1)-like, A/Victoria/361/2011(H3N2)-like and B/Wisconsin/1/2010-like strains.

*Note: A/California/7/2009 is an influenza A(H1N1)pdm09 strain
Figure 6. Cumulative laboratory-confirmed viruses by DHB from week 1 to week 33, 18 August 2013

Compiled by:
Liza Lopez
Health Intelligence Team
ESR Kenepuru Science Centre
PO Box 50 348, Porirua
T: 04 914 0647  F: 04 978 6690  E: liza.lopez@esr.cri.nz

Dr. Sue Huang
WHO National Influenza Centre
ESR Wallaceville Science Centre
PO Box 40158, Upper Hutt