

INFLUENZA WEEKLY UPDATE

2011/26: 27 June - 3 July 2011

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 26 (27 June - 3 July 2011).

SUMMARY OF THIS REPORT:

Influenza-like illness (ILI) through sentinel surveillance was reported from all 20 District Health Boards (DHB) with a national consultation rate of 39.4 per 100 000 (149 ILI consultations). One hundred and eighty-five swabs were received from sentinel (35) and non-sentinel surveillance (150). Forty-one viruses were identified from sentinel (17) and non-sentinel surveillance (24): B (25), A(H3N2) (8), A (not sub-typed) (7) and pandemic A(H1N1) 09 (1).

INFLUENZA-LIKE ILLNESS SURVEILLANCE

In the past week, a total of 149 consultations for influenza-like illness were reported from 81 general practices in all 20 DHBs. This gives a weekly consultation rate of 39.4 per 100 000 patient population.

The graph below compares the consultation rates for influenza-like illness for each DHB over the past week. Counties Manukau DHB (161.7 per 100 000, 2 cases) had the highest consultation rate, followed by Capital and Coast (146.2 per 100 000, 19 cases) and Waitemata (104.2 per 100 000, 11 cases).

Figure 1: Weekly consultation rates for influenza-like illness by DHB week ending 3 July 2011

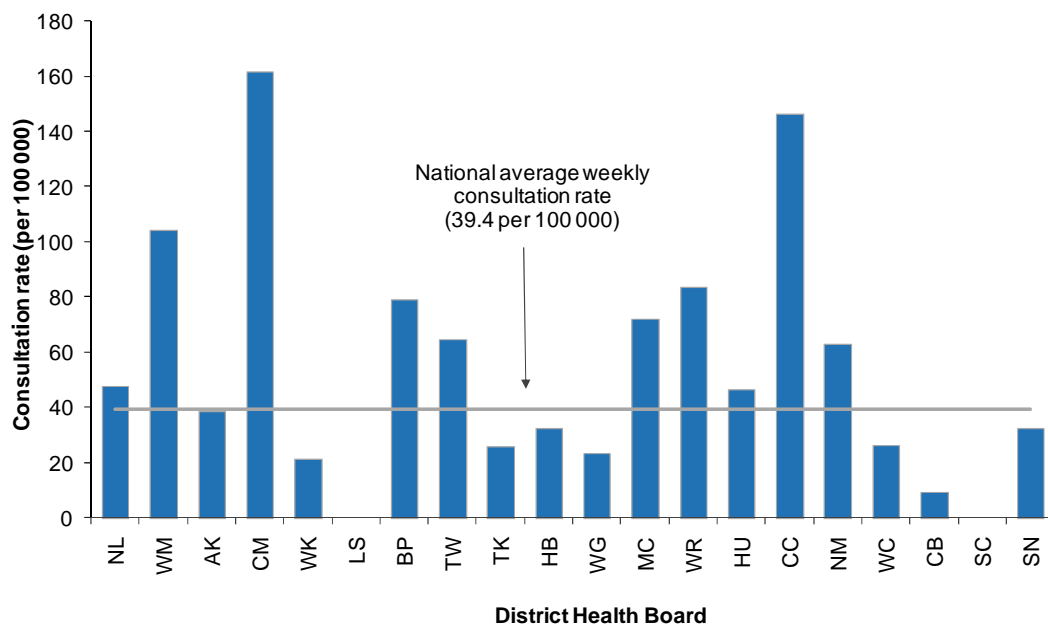
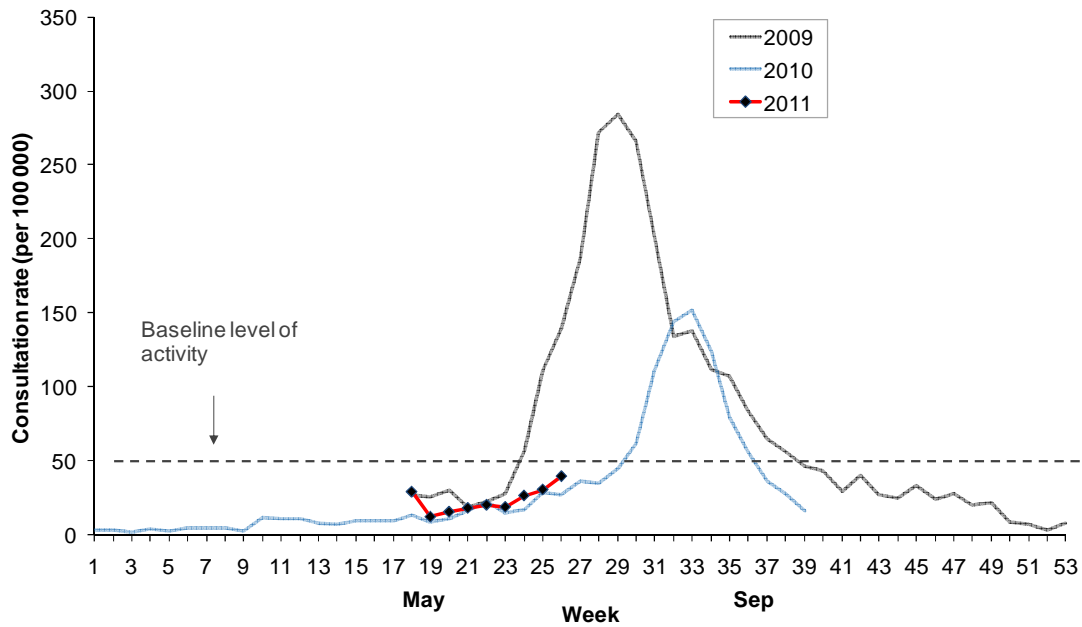


Figure 2 shows the weekly national consultation rates for 2009, 2010 seasons, and 2011 so far. The current rate of influenza-like illness is below the baseline.

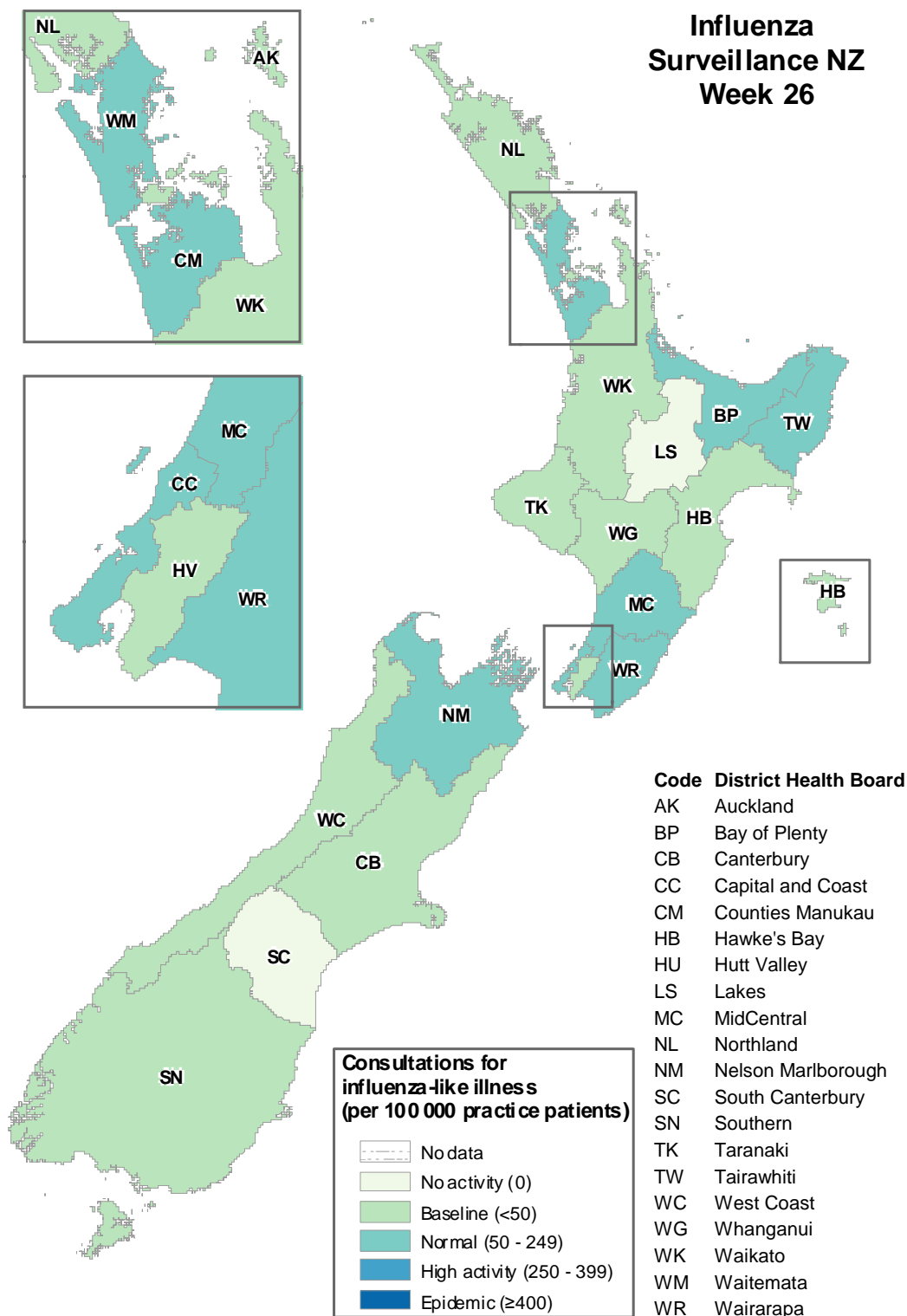
Figure 2: Weekly consultation rates for influenza-like illness in New Zealand, 2009, 2010 and 2011



* 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 3 maps the consultation rates for influenza-like illness by DHB.

Figure 3: Consultation rates for influenza-like illness mapped by DHB for week 26, 2011



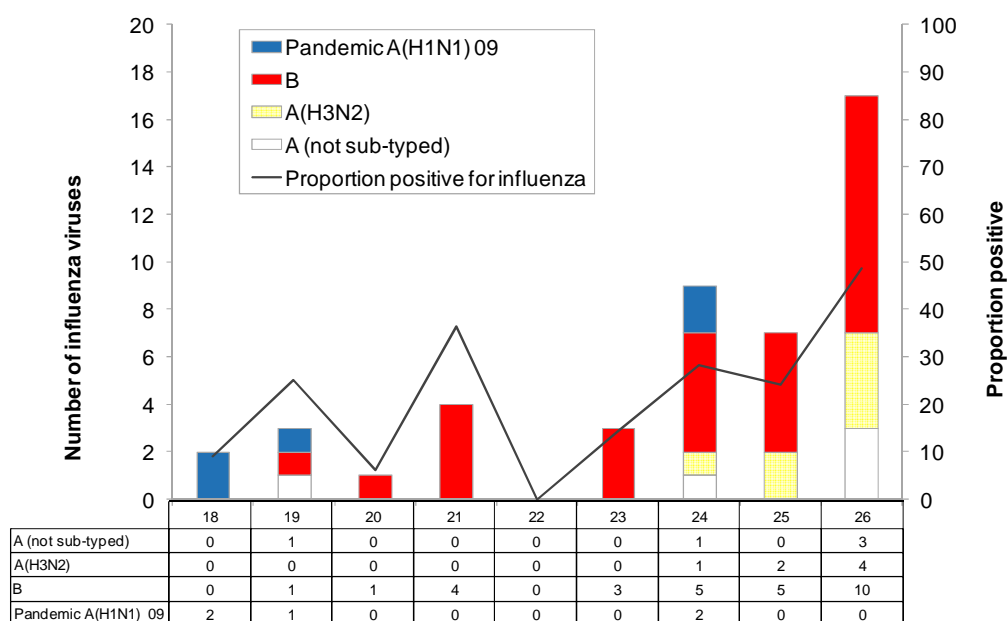
VIROLOGICAL SURVEILLANCE

A total of 35 swabs were received by virology laboratories from sentinel surveillance. Of these, 17 viruses were identified: B (10), A(H3N2) (4) and A (not sub-typed) (3) (Figure 4). The distribution by DHB is shown in Table 1.

Table 1: Influenza viruses from sentinel surveillance for week 26 by DHB

| Antigenic Strain | NL | AK | BP | TK | WG | MC | WR | HU | CC | SN | Total |
|-------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|
| A (not sub-typed) | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 3 |
| A(H3N2) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 4 |
| B | 4 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 10 |
| Total | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 5 | 1 | 17 |

Figure 4: Total influenza viruses from sentinel surveillance by type and week reported, weeks 18–26 and the total percentage positive from the swabs received



In addition, 150 swabs were received by virology laboratories from non-sentinel surveillance. Of these, 24 viruses were identified: B (15), A(H3N2) (4), A (not sub-typed) (4) and pandemic A(H1N1) 09 (1) (Figure 5). The distribution by DHB is shown in Table 2.

Table 2: Influenza viruses from non-sentinel surveillance for week 26 by DHB

| Antigenic Strain | WM | AK | CM | WK | TK | HB | CC | Total |
|---------------------|----------|----------|----------|----------|----------|----------|----------|-----------|
| A (not sub-typed) | 2 | 0 | 1 | 0 | 0 | 1 | 0 | 4 |
| A(H3N2) | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 |
| B | 1 | 7 | 4 | 1 | 0 | 0 | 2 | 15 |
| Pandemic A(H1N1) 09 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| Total | 3 | 7 | 5 | 1 | 1 | 1 | 6 | 24 |

Figure 5: Total influenza viruses from non-sentinel surveillance by type and week reported, weeks 18–26 and the total percentage positive from the swabs received

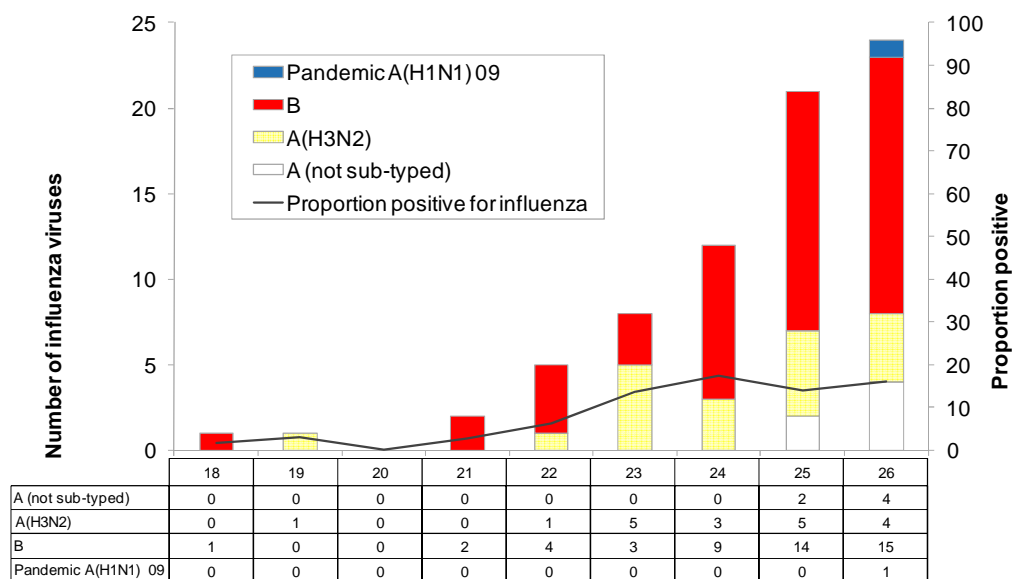


Figure 6 shows the cumulative total of influenza viruses confirmed (sentinel and non-sentinel surveillance) from week 1 to the end of week 26 (3 July 2011). A total of 158 influenza viruses were identified: influenza B (83) including 12 of B/Brisbane/60/2008 - like viruses, pandemic (H1N1) 09 (27) including four A/California/7/2009 (H1N1) - like virus, A(H3N2) (33) including seven A/Perth/16/2009 (H3N2) - like virus, and A (not sub-typed) (15). The current circulating influenza strains are all covered by the 2011 influenza vaccine.

Figure 6: Cumulative laboratory-confirmed viruses by DHB from week 1 to week 26, 3 July 2011

