

# INFLUENZA WEEKLY UPDATE

2013/35: 26–1 September 2013

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 35 (26–1 September 2013).

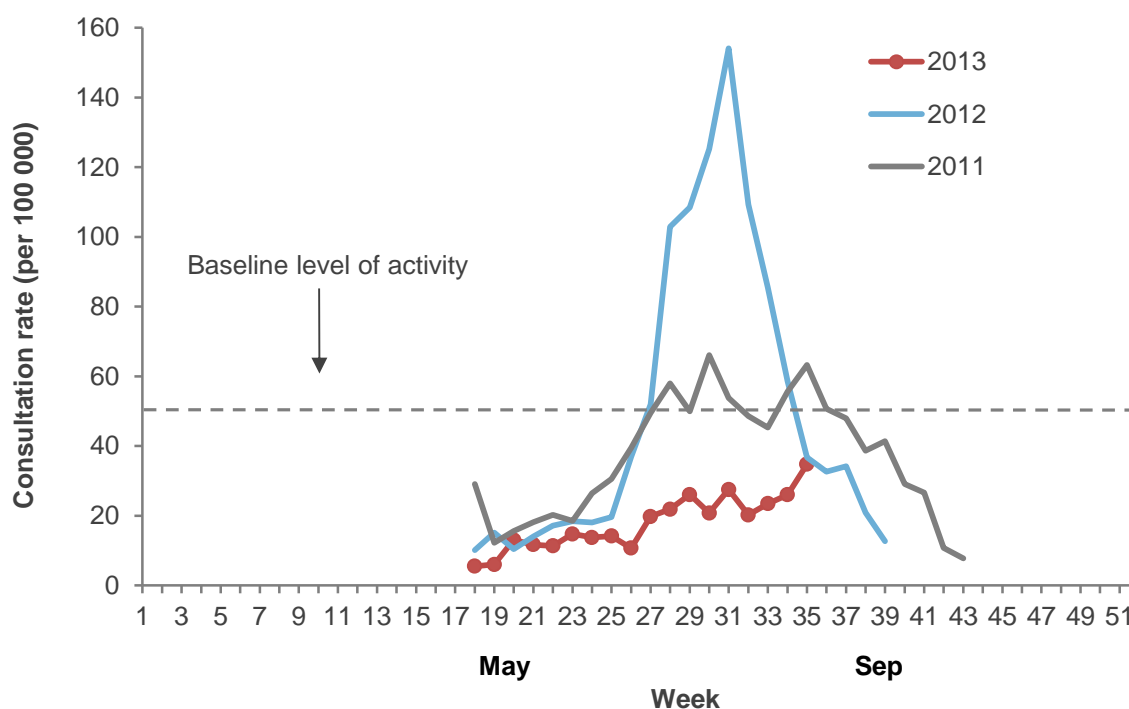
## Summary

- ILI through sentinel surveillance was reported from 18 out of 20 District Health Boards (DHB) with a national consultation rate of 34.7 per 100 000 (128 ILI consultations).
- A total of 383 swabs were received from sentinel (30) and non-sentinel (353) surveillance.
- 206 influenza viruses were identified: A(H3N2) (70) including 22 A/Victoria/361/2011 (H3N2)-like viruses, B (68) including seven B/Wisconsin/1/2010-like viruses, A (not sub-typed) (55), and A(H1N1)pdm09 (13) viruses.

## INFLUENZA-LIKE ILLNESS SURVEILLANCE

In the past week, a total of 128 consultations for influenza-like illness were reported from 66 general practices in 18 out of 20 DHBs. This gives a weekly consultation rate of 34.7 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.

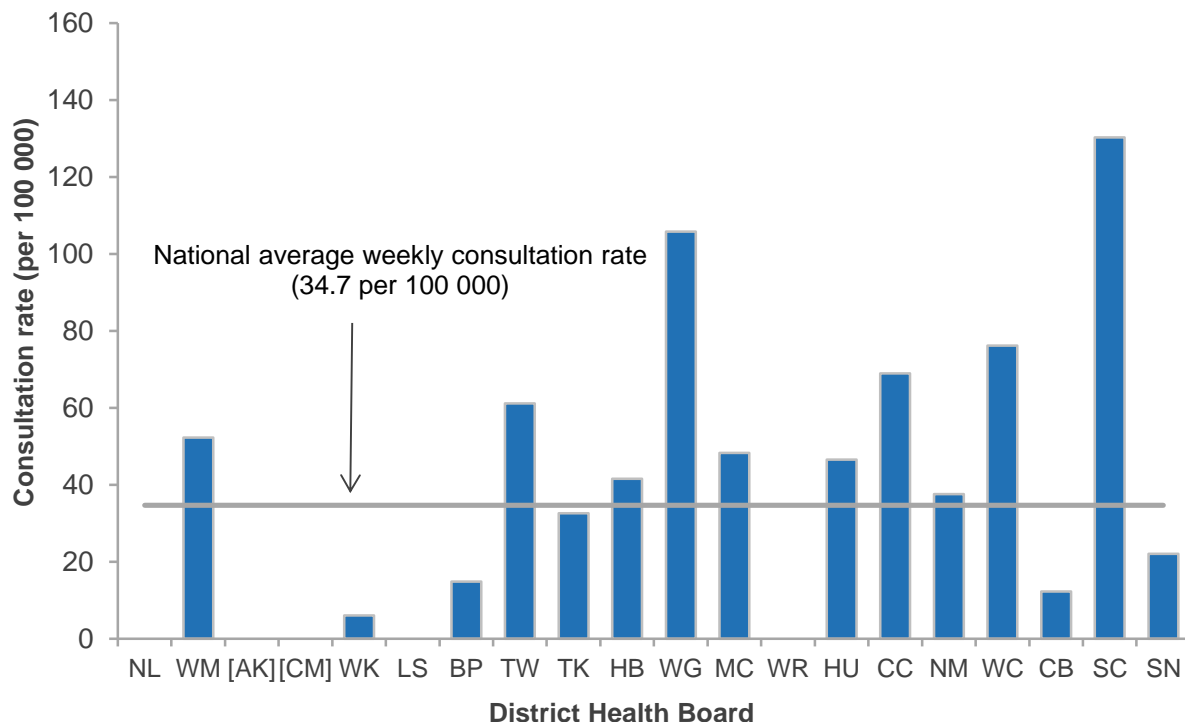
**Figure 1. Weekly consultation rates for influenza-like illness in New Zealand, 2011, 2012 and 2013**



\* 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. South Canterbury DHB had the highest consultation rate (130.3 per 100 000, 9 cases), followed by Whanganui (105.8 per 100 000, 5 cases), and West Coast (76.2 per 100 000, 15 cases).

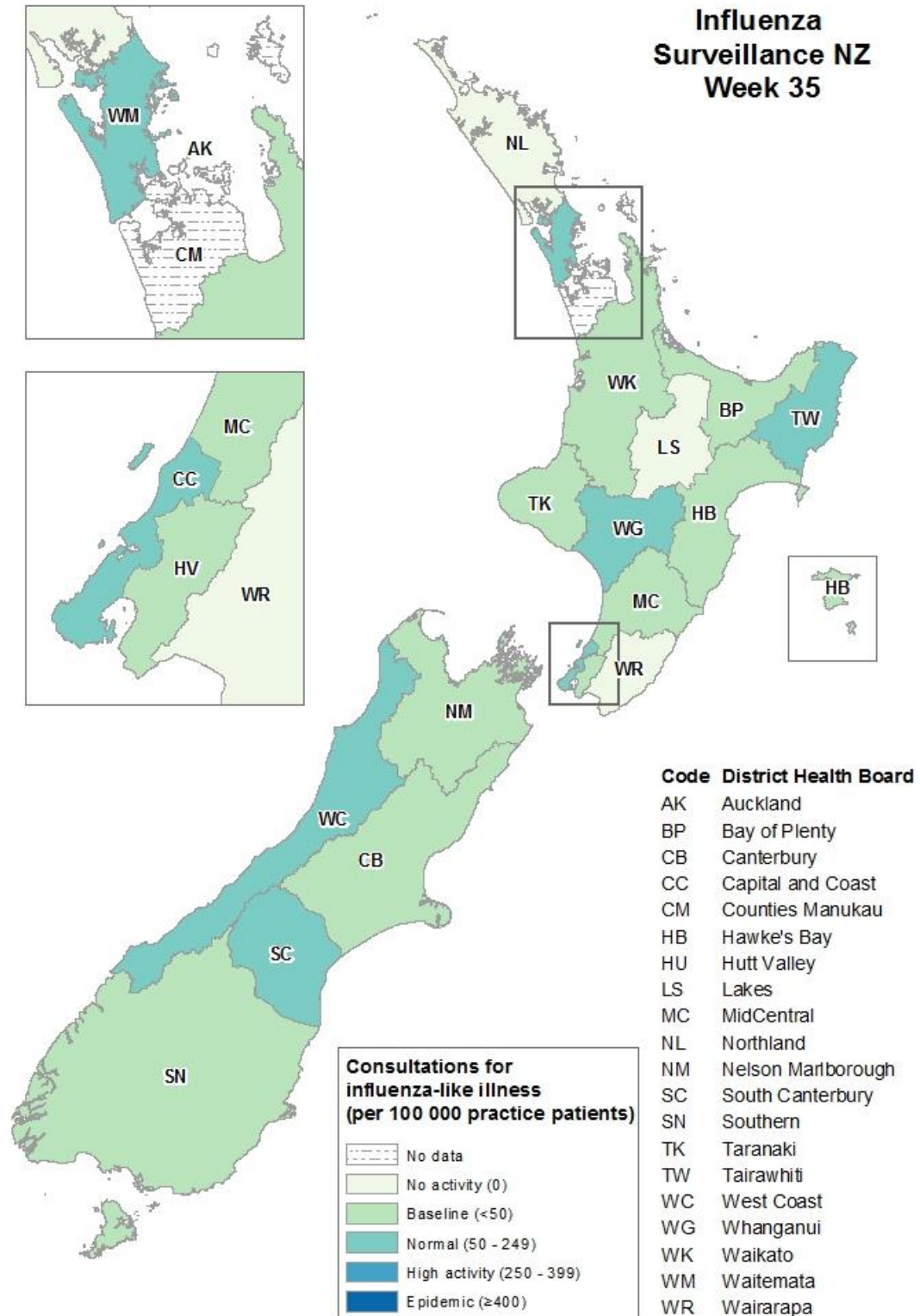
**Figure 2. Weekly consultation rates for influenza-like illness by DHB week ending 1 September 2013**



[ ] 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. Data for week 35 is not yet available. Based on the SHIVERS weekly report, the ILI incidence for Auckland and Counties Manukau DHBs for week 34 were 126.5 per 100 000 and 41.2 per 100 000 patient populations, respectively. For more details, please refer to the website: <http://www.esr.cri.nz/competencies/shivers/Pages/SHIVERSReports.aspx>

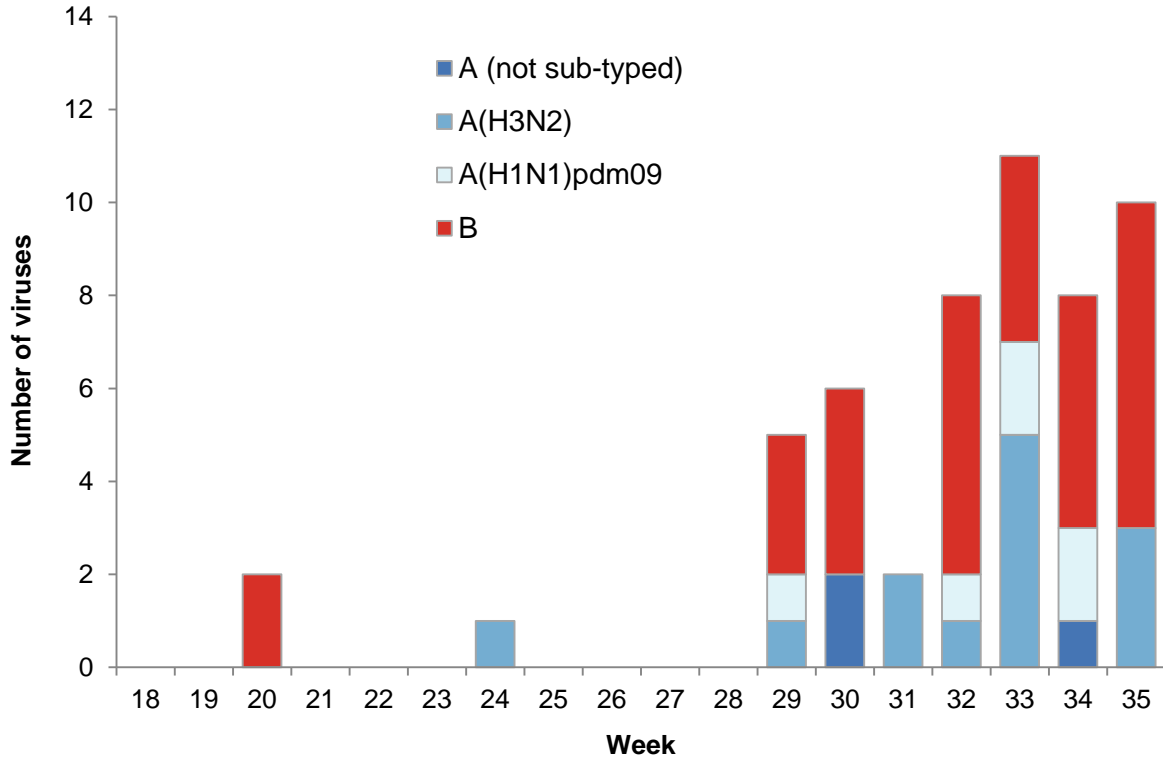
Figure 3. Consultation rates for influenza-like illness mapped by DHB for week 35, 2013



## VIROLOGICAL SURVEILLANCE

A total of 30 swabs were received by virology laboratories from sentinel surveillance. Of these 10 viruses were identified (Figure 4): B (lineage not determined) (7) and A(H3N2) (3). The distribution by DHB is shown in Table 1.

**Figure 4. Total influenza viruses from sentinel surveillance by type and week reported, week 18–35**

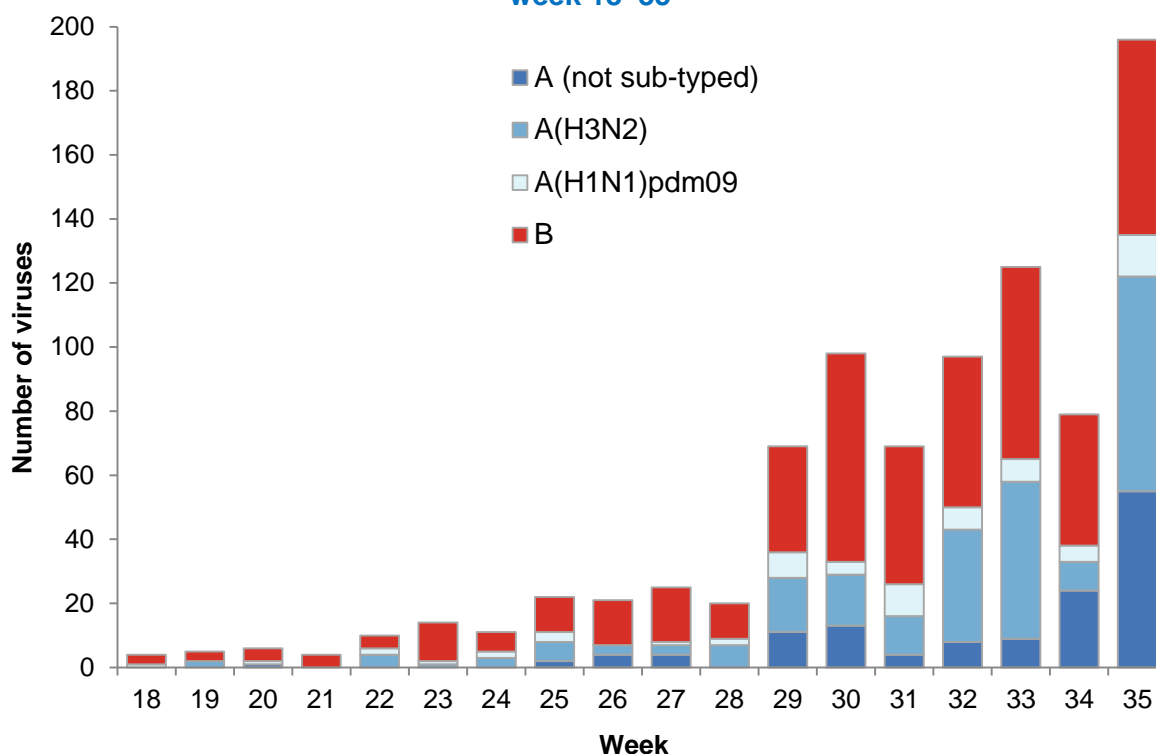


**Table 1. Influenza viruses from sentinel surveillance for week 35 by DHB**

Antigenic strain	DHB								Total
	NL	BP	TK	HB	WG	MC	CC	SN	
A(H3N2)	0	2	0	0	0	0	0	1	3
B (lineage not determined)	1	0	1	1	1	1	2	0	7
<b>Total</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>10</b>

In addition, 353 swabs were received by virology laboratories from non-sentinel surveillance. Of these, 196 influenza viruses were identified (Figure 5): A (not sub-typed) (55), B (lineage not determined) (54), A(H3N2) (45), A/Victoria/361/2011 (H3N2)-like (22), A(H1N1)pdm09 (13), and B/Wisconsin/1/2010-like (7). The distribution by DHB is shown in Table 2.

**Figure 5. Total influenza viruses from non-sentinel surveillance by type and week reported, week 18–35**

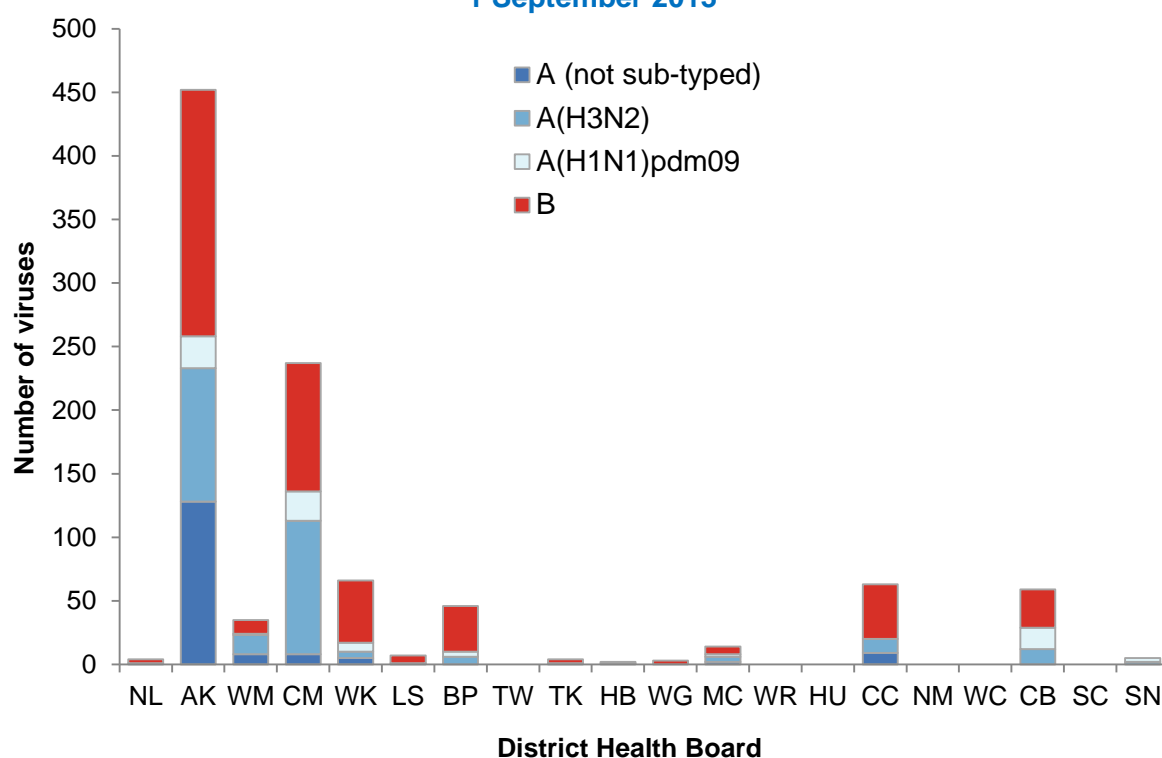


**Table 2. Influenza viruses from non-sentinel surveillance for week 35 by DHB**

Antigenic strain	DHB								Total
	WM	AK	CM	WK	LS	MC	CC	CB	
A (not sub-typed)	5	43	1	2	0	0	4	0	55
A(H1N1)pdm09	0	5	5	0	0	0	0	3	13
A(H3N2)	2	13	29	1	0	0	0	0	45
A/Victoria/361/2011 (H3N2)	0	18	3	0	0	1	0	0	22
B (lineage not determined)	3	28	6	3	1	3	8	2	54
B/Wisconsin/1/2010-like	0	2	1	4	0	0	0	0	7
<b>Total</b>	<b>10</b>	<b>109</b>	<b>45</b>	<b>10</b>	<b>1</b>	<b>4</b>	<b>12</b>	<b>5</b>	<b>196</b>

Figure 6 shows the cumulative total of influenza viruses confirmed (sentinel and non-sentinel surveillance) from week 1 to the end of week 35 (1 September 2013). A total of 997 influenza viruses were identified: B (486) including 130 B/Wisconsin/1/2010-like and three of B/Brisbane/60/2008-like viruses, A(H3N2) (266) including 71 A/Victoria/361/2011 (H3N2)-like viruses, A (not sub-typed) (161), and A(H1N1)pdm09 (84) including 26 A/California/7/2009 (H1N1)-like viruses.

**Figure 6. Cumulative laboratory-confirmed viruses by DHB from week 1 to week 35, 1 September 2013**



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.

### Antiviral susceptibility monitoring, WHO National Influenza Centre, Institute of Environmental Science and Research (ESR)

From 1 January–5 September 2013, antiviral susceptibility were tested for 314 influenza viruses: (35 A(H1N1)pdm09, 95 A(H3N2) and 184 influenza B) were tested for the neuraminidase inhibitor oseltamivir (Tamiflu) and none of them showed resistance to oseltamivir. In addition, 314 influenza viruses (35 A(H1N1)pdm09, 96 A(H3N2) and 183 influenza B) for the neuraminidase inhibitor zanamivir (Relenza) and none of them showed resistance to zanamivir.

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