Influenza Weekly Surveillance Report

A REPORT BY THE HEALTH PROTECTION SURVEILLANCE CENTRE IN COLLABORATION WITH THE IRISH COLLEGE OF GENERAL PRACTITIONERS, THE NATIONAL VIRUS REFERENCE LABORATORY & THE DEPARTMENTS OF PUBLIC HEALTH.

Week 41 2006 (9th to 15th October 2006)

Summary

During week 41 2006, influenza activity was at low levels in Ireland, with 14 influenza-like illness (ILI) cases reported by sentinel GPs. No specimens tested by the NVRL were positive for influenza virus during week 41.

Background

This is the seventh season of influenza surveillance using computerised sentinel general practices in Ireland. The Health Protection Surveillance Centre (HPSC) is working in collaboration with the Irish College of General Practitioners (ICGP), the National Virus Reference Laboratory (NVRL) and the Departments of Public Health on this sentinel surveillance project. Forty-seven sentinel general practices have been recruited to report on the number of patients with ILI on a weekly basis.

ILI is defined as the sudden onset of symptoms with a temperature of 38°C or more, with two or more of the following: headache, sore throat, dry cough and myalgia. Sentinel GPs send a combined nasal and throat swab, to the NVRL, on at least one patient per week where a clinical diagnosis of ILI is made during the influenza season. This report includes data on ILI cases reported by sentinel GPs, influenza test results from the NVRL, influenza notifications, registered deaths attributed to influenza, and regional influenza activity reported by the Departments of Public Health.

Results

Clinical Data

Fourteen ILI cases were reported from sentinel GPs during week 41 2006, corresponding to an ILI consultation rate of 10.1 per 100,000 population (figure 1).

Results (continued)

One ILI case was aged between 5-14 years (5.2 per 100,000 population), 11 were aged between 15-64 years (11.8 per 100,000 population) and two were reported in those aged 65 or older (13.0 per 100,000). Thirty-seven of the 47 (78.7%) sentinel general practices reported during week 41 2006, with nine reporting ILI.

![Figure 2: Age specific GP consultation rate* for ILI per 100,000 population by week during the 2006/2007 influenza season.](image)

*Please note the denominator used in the age specific consultation rate is from the 2002 census data; this assumes that the age distribution of the sentinel general practices is similar to the national age distribution.

**Virological Data from the National Virus Reference Laboratory (NVRL)**

The NVRL tested seven specimens taken by sentinel GPs during week 41 2006, all seven specimens were negative for influenza virus. The NVRL also tested 26 non-sentinel specimens taken during week 41 2006, mainly from hospitalised paediatric cases. Three non-sentinel specimens were positive for respiratory syncytial virus (RSV), three were positive for Parainfluenza virus 3 and none were positive for influenza virus (table 1). Figure 3 compares the ILI consultation rates by season and the number of positive influenza specimens tested by the NVRL.

**Table 1: Number of sentinel and non-sentinel* respiratory specimens and positive results for week 41 2006**

<table>
<thead>
<tr>
<th>Week Number</th>
<th>Specimen Type</th>
<th>Total Specimens</th>
<th>No. Influenza Positive</th>
<th>% Influenza Positive</th>
<th>Influenza A</th>
<th>Influenza B</th>
<th>RSV</th>
</tr>
</thead>
<tbody>
<tr>
<td>41 2006</td>
<td>Sentinel</td>
<td>7</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>Non-Sentinel</td>
<td>26</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>33</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>

*Please note that non-sentinel specimens include all specimens referred to the NVRL, these specimens are mainly from hospitals and some GPs and may include more than one specimen from each case.

Weekly Influenza Notifications
No influenza cases were notified to HPSC during week 41 2006. Influenza cases notified to HPSC during the summer of 2006 and during the 2006/2007 influenza season are shown in figure 4, and compared to ILI consultation rates.

Figure 4: Number of notifications* of influenza (possible & confirmed) by type and by week of notification compared to sentinel GP ILI consultation rates per 100,000 population during the summer of 2006 and the 2006/2007 influenza season.

*Mortality Data
No deaths registered during week 41 2006 were attributed to influenza.
Outbreak Reports
No influenza/ILI outbreaks were reported to HPSC during week 41 2006.

Regional Influenza Activity by HSE-Health Area
Influenza activity is reported on a weekly basis from the Departments of Public Health. Influenza activity is based on sentinel GP ILI consultation rates, laboratory confirmed influenza cases and influenza/ILI outbreaks. Each Department of Public Health has established one sentinel hospital in each HSE-Area, to report total hospital admissions, accident and emergency admissions and respiratory admissions data on a weekly basis. Sentinel primary and secondary schools were also established in each HSE-Area in close proximity to the sentinel GPs, reporting absenteeism data on a weekly basis. Three HSE-Areas reported sporadic influenza activity during week 40 2006 (figure 5) based on isolated cases of ILI. No increases in hospital admissions or sentinel school absenteeism were reported to HPSC for week 40 2006.

Figure 5: Map of influenza activity by HSE-Health Area during week 40 2006

Influenza Activity in Northern Ireland
Twenty-five ILI cases were reported from sentinel GPs in Northern Ireland during week 41 2006, corresponding to a rate of 31.2 per 100,000 population, which remains stable in comparison with the updated rate of 31.2 per 100,000 population during week 40. There were no laboratory detections of influenza for week 41 2006.
http://www.cdscni.org.uk

Influenza Activity in England, Scotland & Wales
Influenza activity in the United Kingdom is currently well below baseline levels with no indication yet that influenza viruses are circulating in the community in England, Wales, Scotland or Northern Ireland. No influenza viruses have been detected from community samples referred to the Influenza Laboratory at the Centre for Infections RVU in weeks 40/06 and 41/06, and in Europe influenza activity also remains low.
http://www.hpa.org.uk/infections/topics%5Faz/influenza/seasonal/activity0607/flureport.htm

Influenza Activity in Europe
The European Influenza Surveillance Scheme will produce its first report of the 2006/2007 season on the 20th October 2006. http://www.eiss.org/index.cgi
**Influenza Activity in Canada**
During weeks 39 and 40, sporadic activity was reported in British Columbia, Alberta and Ontario, while the rest of the country reported no activity. From weeks 39 to 40, three (0.1%) of the 2,143 specimens tested for influenza virus were positive for influenza virus. The first influenza B virus detection for the season was detected in Alberta in week 40. The ILI consultation rates remained low: 9 per 1,000 patient visits in week 39 and 7 per 1,000 patient visits in week 40. ILI consultation rates for weeks 39 and 40 were highest among children in regions reporting ILI activity. There have been no influenza outbreaks reported so far this season. Subsequent findings confirmed that the school outbreak previously reported in week 37 was not due to influenza and since the start of the season no positive influenza laboratory detections have been reported in the region where the school is located.


**Influenza Activity in the United States**
During week 40 2006, a low level of influenza activity was reported in the United States. Three (0.4%) specimens tested by U.S. World Health Organization and National Respiratory and Enteric Virus Surveillance System collaborating laboratories were positive for influenza. The proportion of patient visits to sentinel providers for influenza-like illness (ILI) and the proportion of deaths attributed to pneumonia and influenza were below baseline levels. Two states reported local influenza activity; five states reported sporadic influenza activity; 41 states, New York City, and the District of Columbia reported no influenza activity and 2 states did not report.

http://www.cdc.gov/flu/

**Influenza Activity Worldwide**
During week 40 2006 the following influenza isolates were reported, Argentina 10 (9 A unsubtyped and 1 B), Australia 2 B, Brazil 1 A unsubtyped, Chile 17 (1 AH1 and 16 A unsubtyped) and China 21 (9 AH1, 9 AH3, 2 A unsubtyped, & 1 B). http://gamapserver.who.int/GlobalAtlas/home.asp

**Avian Influenza**
As of the 18th of October 2006, 256 confirmed human cases and 151 deaths from avian influenza A (H5N1) have been reported to the WHO from Azerbaijan, Cambodia, China, Djibouti, Egypt, Indonesia, Iraq, Thailand, Turkey and Vietnam.

Further information on avian influenza is available on the following websites:
HPSC http://www.ndsc.ie/hpsc/A-Z/Respiratory/AvianInfluenza/
ECDC http://www.ecdc.eu.int/

**Northern Hemisphere Influenza Vaccine for the 2006/2007 Season**
The members of the WHO Collaborating Centres on Influenza recommended that influenza vaccines for the 2006/2007 influenza season in the Northern Hemisphere contain the following strains:
- an A/New Caledonia/20/99(H1N1)-like virus;
- an A/Wisconsin/67/2005 (H3N2)-like virus\(^a\)
- a B/Malaysia/2506/2004-like virus\(^b\)

Candidate vaccine viruses include:
\(^a\)A/Wisconsin/67/2005 (H3N2) and A/Hiroshima/52/2005
\(^b\)B/Malaysia/2506/2004 virus and B/Ohio/1/2005


**Further information on influenza can be found on the HPSC website**

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**Acknowledgements**
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This report was produced by Sarah Jackson & Dr Joan O'Donnell, HPSC