

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 44 2006 (30th October to 5th November 2006)

Summary

During week 44 2006, influenza activity was at low levels in Ireland, with five influenza-like illness (ILI) cases reported by sentinel GPs. No specimens tested by the NVRL were positive for influenza virus during week 44.

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-eight 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

Five ILI cases were reported from sentinel GPs during week 44 2006, corresponding to an ILI consultation rate of 3.4 per 100,000 population, a decrease from the updated rate of 6.9 during week 43 (figure 1).

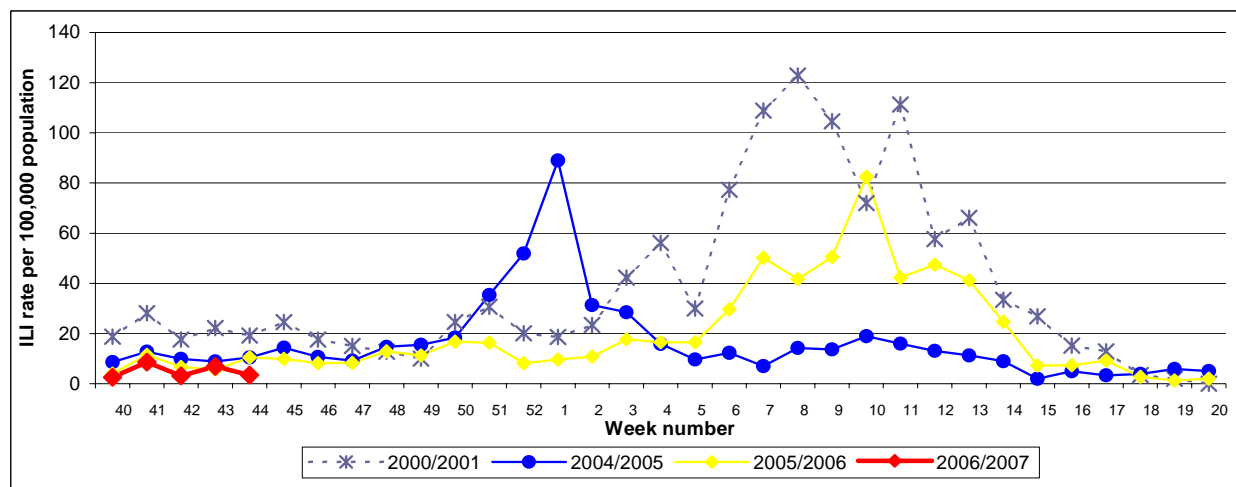


Figure 1: GP consultation rate for ILI per 100,000 population by week, during the 2000/2001*, 2004/2005, 2005/2006 & 2006/2007 influenza seasons.

* Highest recorded levels of ILI activity since initiation of sentinel surveillance.

Results (continued)

Four ILI cases were aged between 15-64 years (4.0 per 100,000 population) and one case was aged 65 years or older (6.0 per 100,000 population) as shown in figure 2. Thirty-nine of the 48 (81.3%) sentinel general practices reported during week 44 2006, with five reporting ILI.

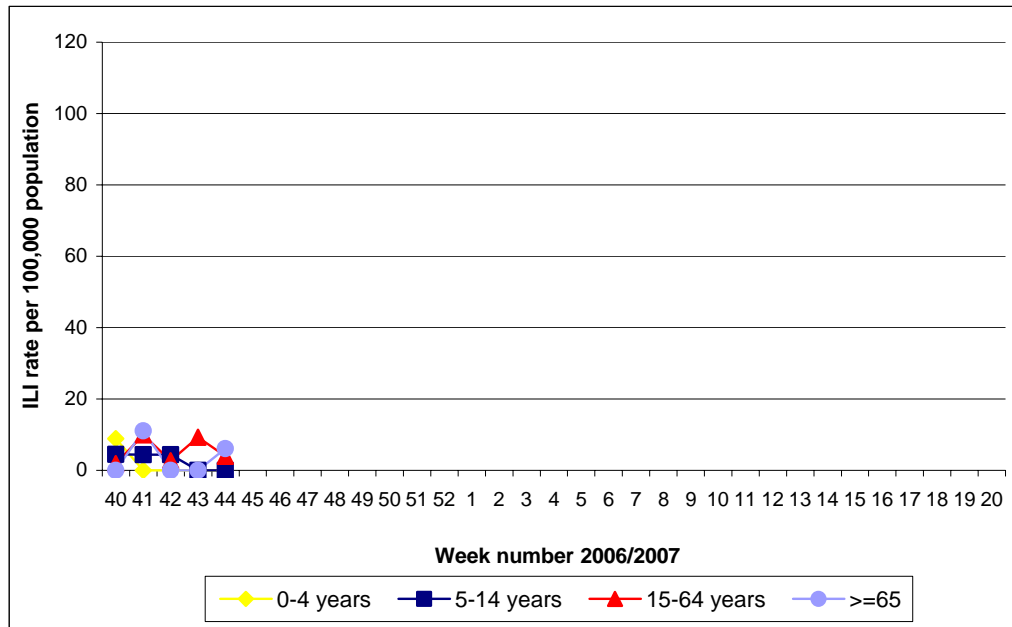


Figure 2: Age specific GP consultation rate* for ILI per 100,000 population by week during the 2006/2007 influenza season. *Please note the denominator used in the age specific consultation rate is from the 2002 census data; this assumes that the age distribution of the sentinel general practices is similar to the national age distribution.

Virological Data from the National Virus Reference Laboratory (NVRL)

The NVRL tested one specimen taken by sentinel GPs during week 44 2006 which was negative for influenza virus. The NVRL also tested 47 non-sentinel specimens taken during week 44 2006, mainly from hospitalised paediatric cases. Fourteen non-sentinel specimens were positive for respiratory syncytial virus (RSV) 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 44 2006 and the 2006/2007 season to date

Week Number	Specimen Type	Total Specimens	No. Influenza Positive	% Influenza Positive	Influenza A	Influenza B	RSV
44 2006	Sentinel	1	0	0.0	0	0	NA
	Non-Sentinel	47	0	0.0	0	0	14
	Total	48	0	0.0	0	0	14
40-44 2006	Sentinel	18	0	0.0	0	0	NA
	Non-Sentinel	213	0	0.0	0	0	31
	Total	231	0	0.0	0	0	31

*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.

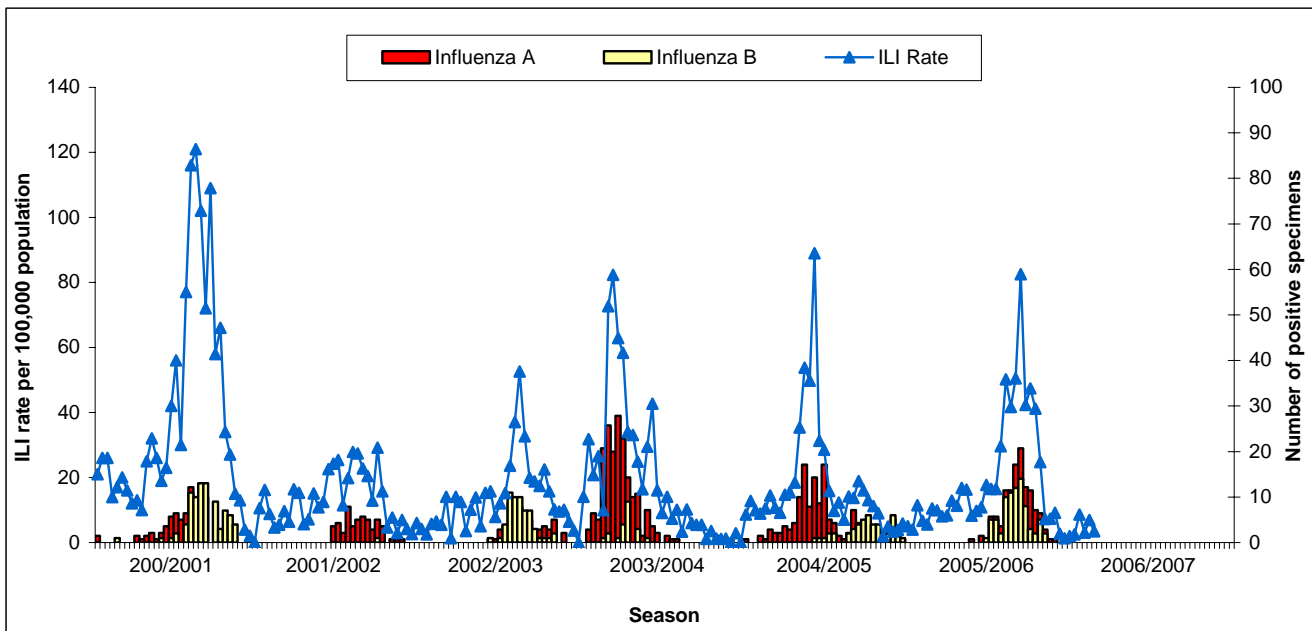


Figure 3: ILI rate per 100,000 population and the number of positive influenza specimens detected by the NVRL during the 2000/2001, 2001/2002, 2002/2003, 2003/2004, 2004/2005, 2005/2006 & 2006/2007 seasons.

Weekly Influenza Notifications

No influenza cases were notified to HPSC during week 44 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.

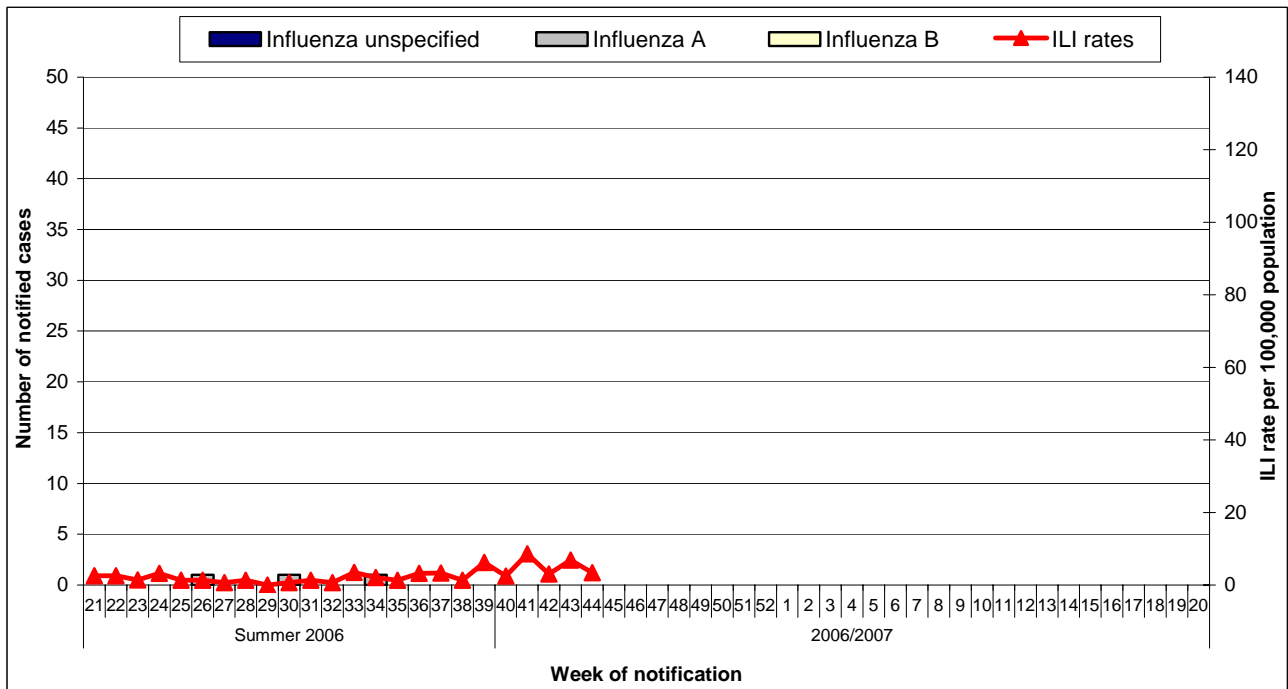


Figure 4: Number of notifications* of influenza (possible & confirmed) by type and by week of notification compared to sentinel GP ILI consultation rates per 100,000 population during the summer of 2006 and the 2006/2007 influenza season.

*Notification data are provisional and were extracted from [CIDR](#) on the 07/11/2006 at 14.21

Mortality Data

No deaths registered during week 44 2006 were attributed to influenza.

Outbreak Reports

No influenza/ILI outbreaks were reported to HPSC during week 44 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. Sporadic influenza activity, based on isolated cases of ILI, was reported by HSE-ER, MWA, NEA, NWA, SA and SEA during week 43 2006 (figure 5). No activity was reported from HSE-MA and WA. No increases in hospital admissions or sentinel school absenteeism were reported to HPSC for week 43 2006.

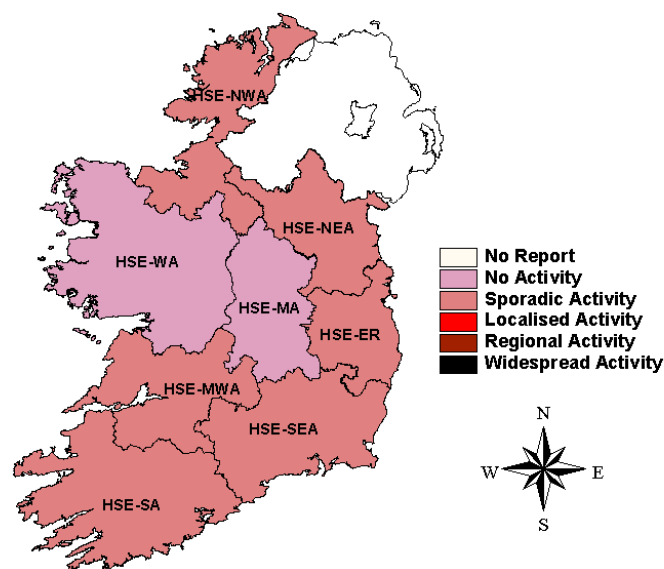


Figure 5: Map of influenza activity by HSE-Health Area during week 43 2006

Influenza Activity in Northern Ireland

Thirty-five ILI cases and two cases of clinical influenza were reported from sentinel GPs in Northern Ireland during week 44 2006, corresponding to a combined rate of 43.8 per 100,000 population, a slight increase from the updated rate of 42.4 per 100,000 population during week 43. There were no laboratory detections of influenza for week 44 2006.

<http://www.cdscni.org.uk>

Influenza Activity in England, Scotland & Wales

Influenza activity remains very low across the United Kingdom. Clinical indicators of influenza activity have remained stable in England, Scotland and Wales. All remain well below clinical baselines thresholds in regions in which thresholds are used. Detections of influenza A and B from NHS and HPA laboratories are also at very low levels, as expected for this time of year. Laboratory confirmed infections of Respiratory Syncytial Virus (RSV) are increasing, but remain at levels similar to those recorded last season (2005/2006). Influenza has not been detected in any specimens sent to the Respiratory Virus Unit at the Centre for Infections during week 44 2006.

<http://www.hpa.org.uk/infections/topics%5Faz/influenza/seasonal/activity0607/flureport.htm>

Influenza Activity in Europe

During week 43 2006, national network levels of clinical activity of ILI and/or acute respiratory infection (ARI) were at a low level in 24 countries that reported the intensity indicator to the European Influenza Surveillance Scheme (EISS); one country did not report a clinical activity level. For the geographic spread indicator, regional data from France, Scotland and Sweden indicated some sporadic activity (which means that isolated cases of laboratory confirmed influenza infection have been found) whilst 22 countries reported no activity. The total number of respiratory specimens collected in 22 countries by sentinel physicians in week 43 2006 was 210, none of which were positive for influenza virus. One non-sentinel specimen (e.g. specimens collected in hospitals) from Spain was positive for influenza A virus (not subtyped). Twenty-two countries reported the presence of no dominant influenza virus type in week 43 2006.

During the 2006/2007 influenza season to date, clinical influenza activity in Europe has been low. There have only been sporadic laboratory confirmed cases of influenza reported since the start of the 2006-2007 season: a total of 12 cases of influenza A and two cases of influenza B from week 40 to 43 2006. Based on subtyping data of all influenza virus detections (N=14; sentinel and non-sentinel data), ten (72%) were type A unsubtyped, two (14%) were type A (H1), of which one was subtype H1N1, and two (14%) were type B.

<http://www.eiss.org/index.cgi>

Influenza Activity in Canada

During week 43, sporadic influenza activity was reported in regions of Alberta (northern region) and Ontario (Toronto), while the rest of the country reported no activity. In week 43, 4 (0.3%) of the 1,294 specimens tested for influenza virus were positive. Fourteen (74%) of the 19 influenza detections so far this season were influenza A viruses. The ILI consultation rate remained low with a rate of 7 per 1,000 patient visits in week 43 and a sentinel response rate of 63%. There have been no influenza outbreaks reported so far this season.

<http://www.phac-aspc.gc.ca/fluwatch/index.html>

Influenza Activity in the United States

During week 43, a low level of influenza activity was reported in the United States. Six (0.6%) specimens tested by U.S. World Health Organization (WHO) and National Respiratory and Enteric Virus Surveillance System (NREVSS) 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, ten states reported sporadic influenza activity, 36 states, New York City and the District of Columbia reported no influenza activity and two states did not report.

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

Influenza Activity Worldwide

During week 43 2006 the following influenza isolates were reported; China 6 (1 A (H1), 3 A (H3) and 2 A unsubtyped), Madagascar 7 A (H3), New Caledonia 1 A unsubtyped and Tunisia 2 influenza unspecified.

<http://gamapserver.who.int/GlobalAtlas/home.asp>

Avian Influenza

As of the 8th of November 2006, 256 confirmed human cases and 152 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:

WHO http://www.who.int/csr/disease/avian_influenza/en/

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:

^aA/Wisconsin/67/2005 (H3N2) and A/Hiroshima/52/2005

^bB/Malaysia/2506/2004 virus and B/Ohio/1/2005

<http://www.who.int/csr/disease/influenza/recommendations2007north/en/index.html>

Further information on influenza can be found on the [HPSC website](#)

Acknowledgements

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