

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 43 2006 (23rd to 29th October 2006)

Summary

During week 43 2006, influenza activity was at low levels in Ireland, with 10 influenza-like illness (ILI) cases reported by sentinel GPs. No specimens tested by the NVRL were positive for influenza virus during week 43.

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 38⁰C 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

Ten ILI cases were reported from sentinel GPs during week 43 2006, corresponding to an ILI consultation rate of 7.8 per 100,000 population, an increase from the updated rate of 2.6 during week 42 (figure 1).

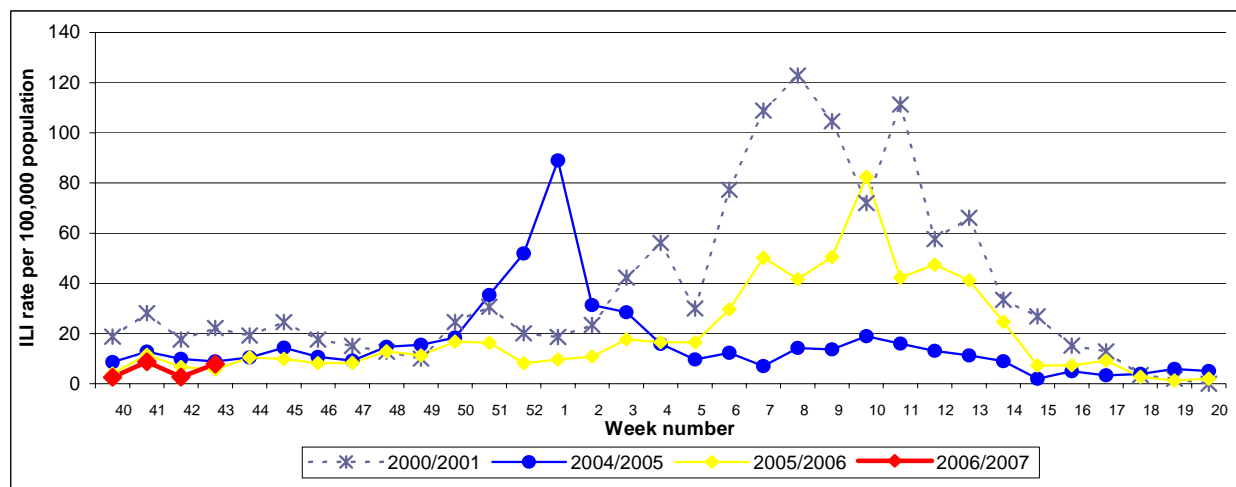


Figure 1: GP consultation rate for ILI per 100,000 population by week, during the 2000/2001*, 2004/2005, 2005/2006 & 2006/2007 influenza seasons.

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

Results (continued)

All 10 ILI cases were aged between 15-64 years, corresponding to an age specific rate of 11.5 per 100,000 population, as shown in figure 2. Thirty-four of the 48 (70.8%) sentinel general practices reported during week 43 2006, with seven reporting ILI.

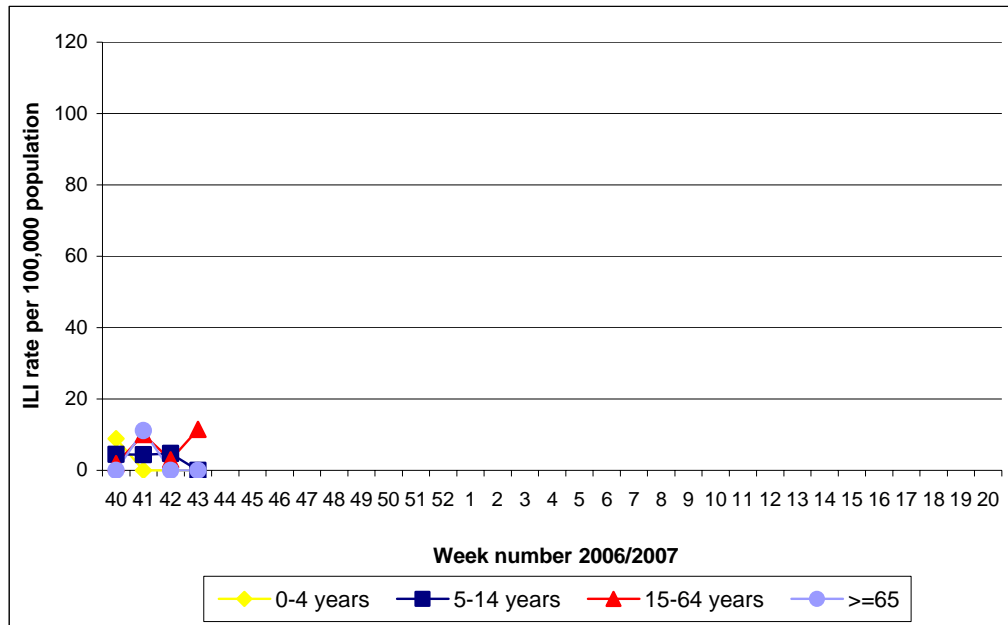


Figure 2: Age specific GP consultation rate* for ILI per 100,000 population by week during the 2006/2007 influenza season. *Please note the denominator used in the age specific consultation rate is from the 2002 census data; this assumes that the age distribution of the sentinel general practices is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

Virological Data from the National Virus Reference Laboratory (NVRL)

The NVRL tested two specimens taken by sentinel GPs during week 43 2006 and both specimens were negative for influenza virus. The NVRL also tested 41 non-sentinel specimens taken during week 43 2006, mainly from hospitalised paediatric cases. Three 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 43 2006 and the 2006/2007 season to date

Week Number	Specimen Type	Total Specimens	No. Influenza Positive	% Influenza Positive	Influenza A	Influenza B	RSV
43 2006	Sentinel	2	0	0.0	0	0	NA
	Non-Sentinel	41	0	0.0	0	0	3
	Total	43	0	0.0	0	0	3
40-43 2006	Sentinel	16	0	0.0	0	0	NA
	Non-Sentinel	158	0	0.0	0	0	17
	Total	174	0	0.0	0	0	17

*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.

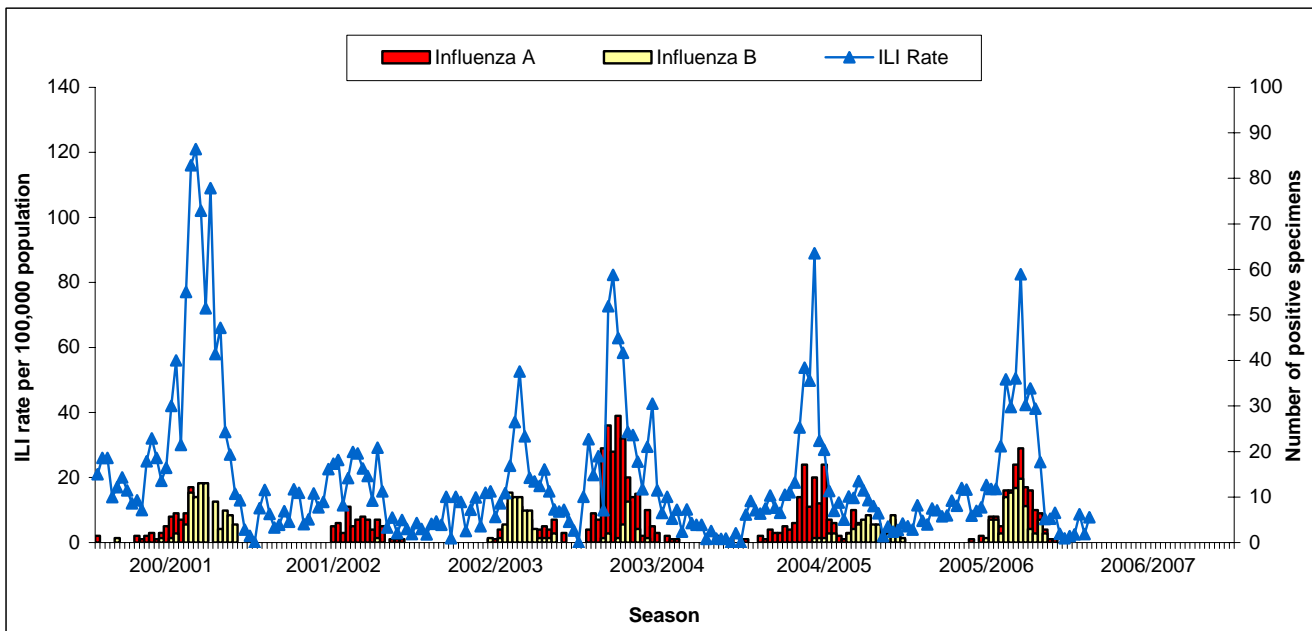


Figure 3: ILI rate per 100,000 population and the number of positive influenza specimens detected by the NVRL during the 2000/2001, 2001/2002, 2002/2003, 2003/2004, 2004/2005, 2005/2006 & 2006/2007 seasons.

Weekly Influenza Notifications

No influenza cases were notified to HPSC during week 43 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.

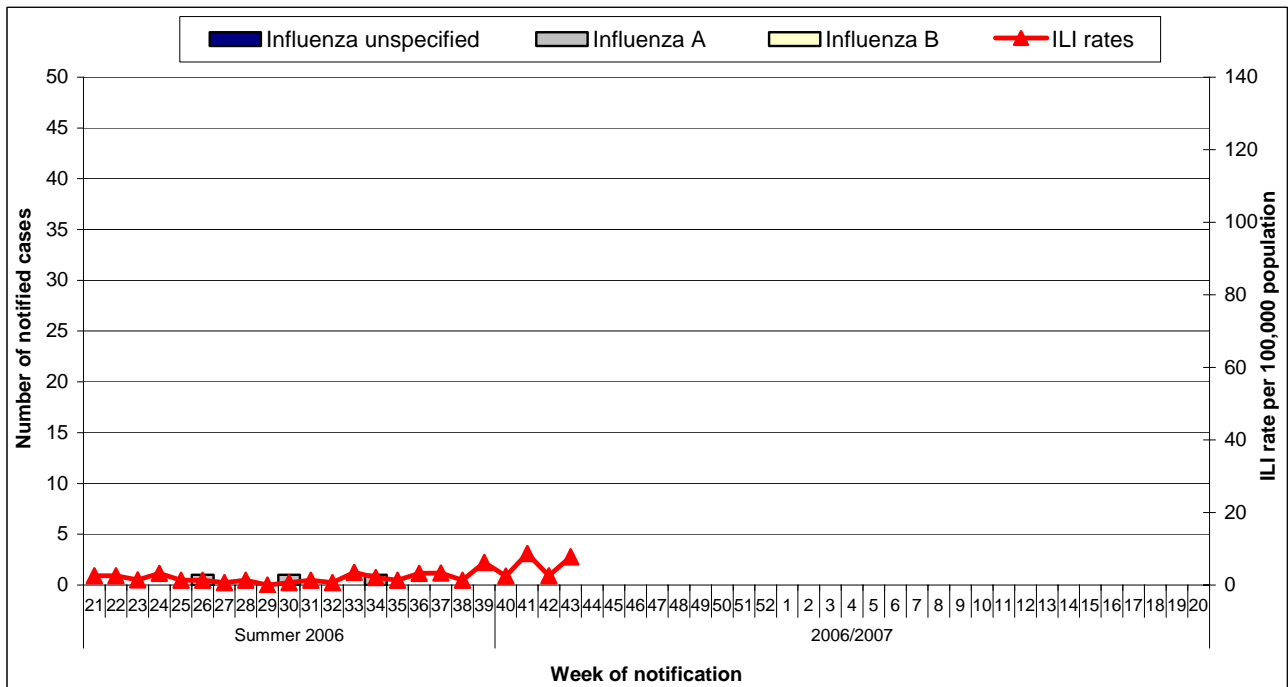


Figure 4: Number of notifications* of influenza (possible & confirmed) by type and by week of notification compared to sentinel GP ILI consultation rates per 100,000 population during the summer of 2006 and the 2006/2007 influenza season.

*Notification data are provisional and were extracted from [CIDR](#) on the 01/11/2006 at 10.41

Mortality Data

No deaths registered during week 43 2006 were attributed to influenza.

Outbreak Reports

No influenza/ILI outbreaks were reported to HPSC during week 43 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, and SA during week 42 2006 (figure 5). No activity was reported from HSE-MA, NWA, SEA and WA. No increases in hospital admissions or sentinel school absenteeism were reported to HPSC for week 42 2006.

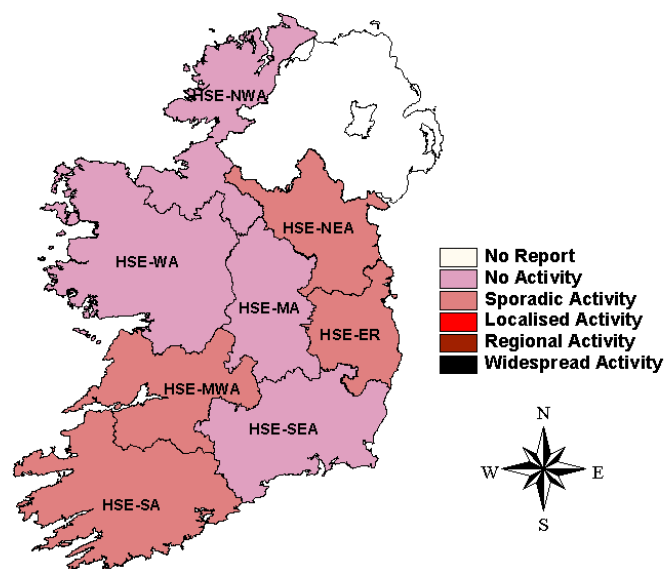


Figure 5: Map of influenza activity by HSE-Health Area during week 42 2006

Influenza Activity in Northern Ireland

Thirty-eight ILI cases and one case of clinical influenza were reported from sentinel GPs in Northern Ireland during week 43 2006, corresponding to a combined rate of 52.6 per 100,000 population, a slight decrease from the updated rate of 53.2 per 100,000 population during week 42. There were no laboratory detections of influenza for week 43 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 42 and 43

2006. <http://www.hpa.org.uk/infections/topics%5Faz/influenza/seasonal/activity0607/flureport.htm>

Influenza Activity in Europe

During week 42 2006, the intensity of clinical activity was at low levels in 23 of 25 countries that reported clinical data to the European Influenza Surveillance Scheme (EISS). The other two countries did not report on the intensity. Regional geographic spread data from France indicated some sporadic activity (which means that isolated cases of laboratory confirmed influenza infection have been found) whilst all other countries reported no activity. The total number of respiratory specimens collected by sentinel physicians in week 42 2006 was 220, of which one was positive for influenza A virus (not subtyped). In addition, one non-sentinel specimen (e.g. specimens collected in hospitals) was positive for influenza A virus (not subtyped). Both positive specimens were from France.

For the 2006/2007 influenza season to date, influenza activity in Europe is currently low and there have only been sporadic laboratory confirmed cases of influenza A in England (1), France (4), the Netherlands (2), Norway (1), Poland (1) and Sweden (1). Some of these cases were probably infections acquired outside of Europe, e.g. the patient with influenza A (H1N1) in the Netherlands became ill with ILI after return from Bombay. Further noticeable is that all four cases of influenza A in France were children.

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

Influenza Activity in Canada

During week 42, sporadic activity continued to be reported in Alberta (northern region) and Ontario (Toronto and central east regions), while the rest of the country reported no activity. In week 42, 5 (0.4%) of the 1,329 specimens tested for influenza virus were positive. Ten (67%) of the 15 influenza detections so far this season were influenza A viruses. The ILI consultation rate remained low with a rate of 13 per 1,000 patient visits in week 42 (see ILI graph) with 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 42, a low level of influenza activity was reported in the United States. Three (0.3%) 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 ILI and the proportion of deaths attributed to pneumonia and influenza were below baseline levels. Two states reported local influenza activity; nine states and New York City reported sporadic influenza activity; and 39 states, and the District of Columbia reported no influenza activity.

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

Influenza Activity Worldwide

During week 42 2006 the following influenza isolates were reported; China 24 (4 A (H1), 4 A (H3), 14 A unsubtyped and 2 B), Madagascar 15 A (H3) and Tunisia 2 influenza unspecified.

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

Avian Influenza

As of the 1st 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