

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 40 2007 (1st - 7th October 2007)

Summary

Welcome to the first influenza surveillance report of the 2007/2008-influenza season. During week 40 2007, influenza activity was at low levels in Ireland, with nine influenza-like illness (ILI) cases reported by sentinel GPs. No specimens tested by the NVRL were positive for influenza virus during week 40. Respiratory syncytial virus (RSV) detections for week 40 2007 were higher than previously recorded for this time of year, possibly indicating an early start to the RSV season.

Background

This is the eighth 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-nine 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

Nine ILI cases were reported from sentinel GPs during week 40 2007, corresponding to an ILI consultation rate of 5.5 per 100,000 population (figure 1). This ILI rate is within expected levels for the start of the influenza season. The mean ILI rate for week 40 for the last eight seasons (2000/2001 - 2007/2008) is 11.9 per 100,000 population. ILI GP consultation rates during the summer of 2007 were at low levels, peaking during week 39 2007 at 6.7 per 100,000 population.

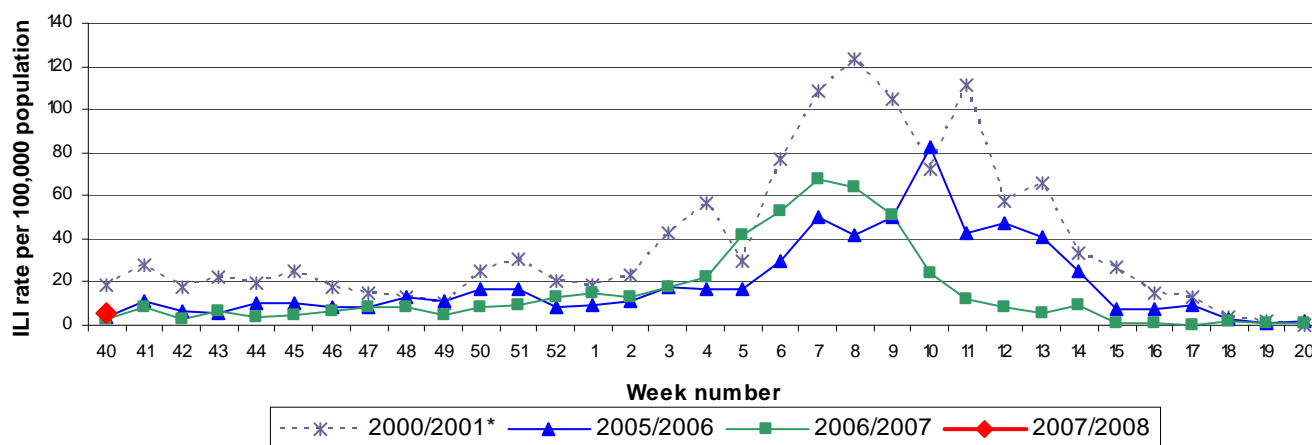


Figure 1: GP consultation rate for ILI per 100,000 population by week, during the 2000/2001*, 2005/2006, 2006/2007 & 2007/2008 influenza seasons *Highest recorded levels of ILI activity since initiation of sentinel surveillance

Results (continued)

Forty-five of 49 (91.8%) sentinel general practices reported during week 40 2007, with five reporting ILI cases. Eight ILI cases were reported in the 15-64 year age group (7.1 per 100,000 population) and one ILI case (5.5 per 100,000 population) was reported in those aged 65 years or older, as shown in figure 2. No ILI cases were reported in the 0-4 and 5-14 year age groups.

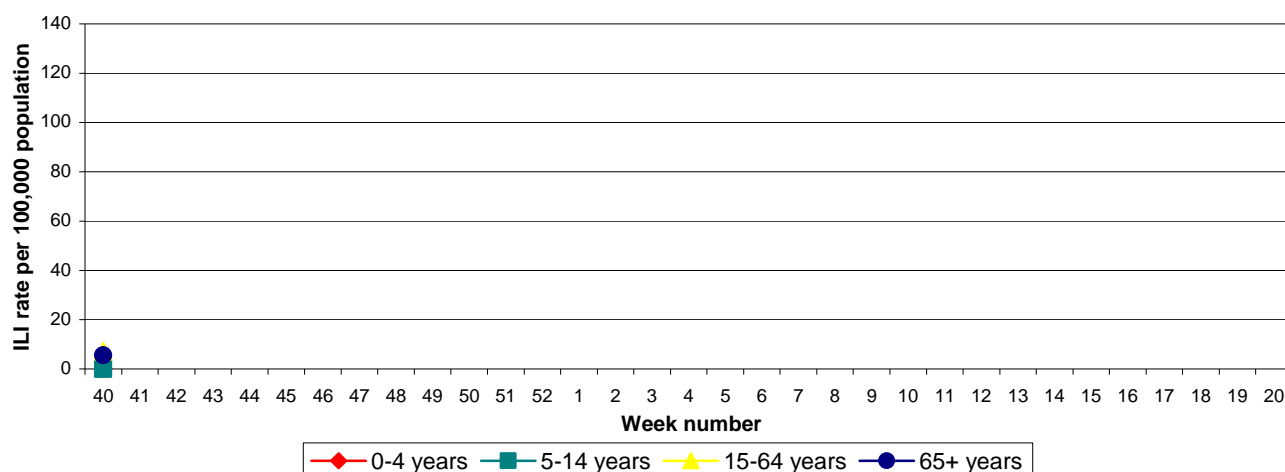


Figure 2: Age specific GP consultation rate* for ILI per 100,000 population by week during the 2007/2008 influenza season
*Please note the denominator used in the age specific consultation rate is from the 2006 census data; this assumes that the age distribution of the sentinel general practices is similar to the national age distribution.

Virological Data from the NVRL

The NVRL tested four specimens taken by sentinel GPs during week 40 2007, all of which were negative for influenza virus. The NVRL also tested 32 non-sentinel specimens taken during week 40 2007, mainly from hospitalised paediatric cases. All non-sentinel specimens were negative for influenza virus and seven were positive for respiratory syncytial virus (RSV) (table 1). Figure 3 compares the ILI consultation rates by season and the number of positive influenza specimens tested by the NVRL. Figure 4 compares the number and percentage of non-sentinel RSV positive specimens detected during the 2006/2007 and 2007/2008 influenza seasons. RSV levels for week 40 2007 are higher than usually recorded for this time of year, possibly indicating an earlier start to the RSV season.

Table 1: Number of sentinel and non-sentinel* respiratory specimens and positive results for week 40 2007

Week Number	Specimen Type	Total Specimens	No. Influenza Positive	% Influenza Positive	Influenza A	Influenza B	RSV
40 2007	Sentinel	4	0	0.0	0	0	NA
	Non-Sentinel	32	0	0.0	0	0	7
	Total	36	0	0.0	0	0	7

*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

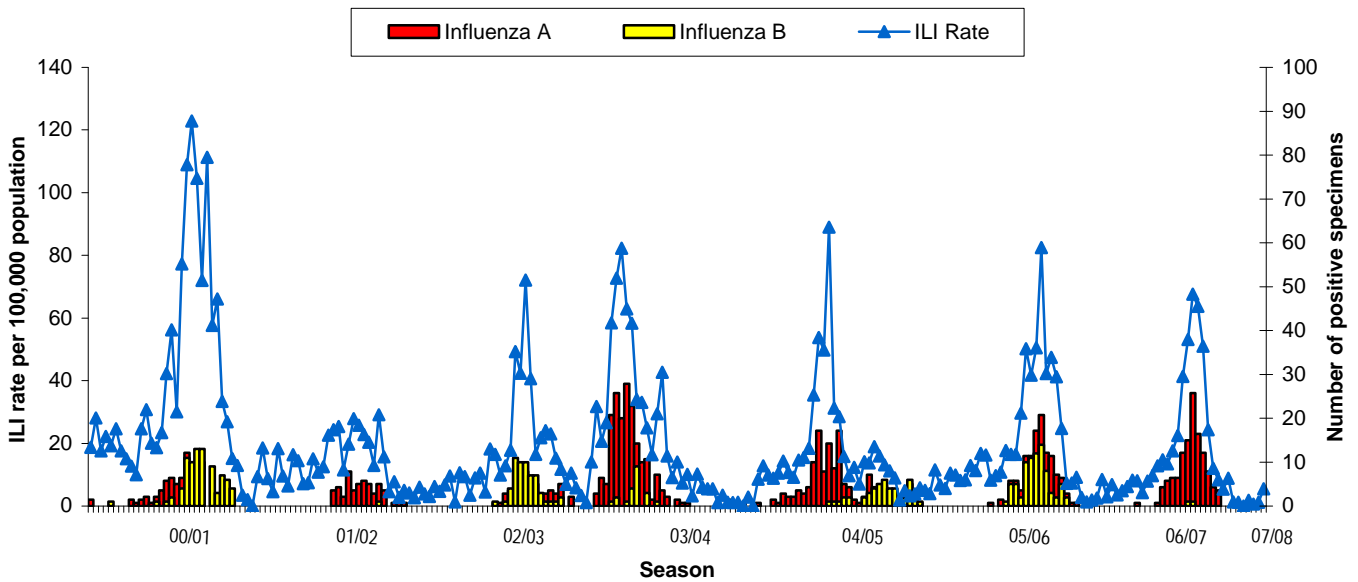


Figure 3: GP ILI consultation rate per 100,000 population and the number of positive influenza specimens detected by the NVRL by week and season, 2000/2001 - 2007/2008

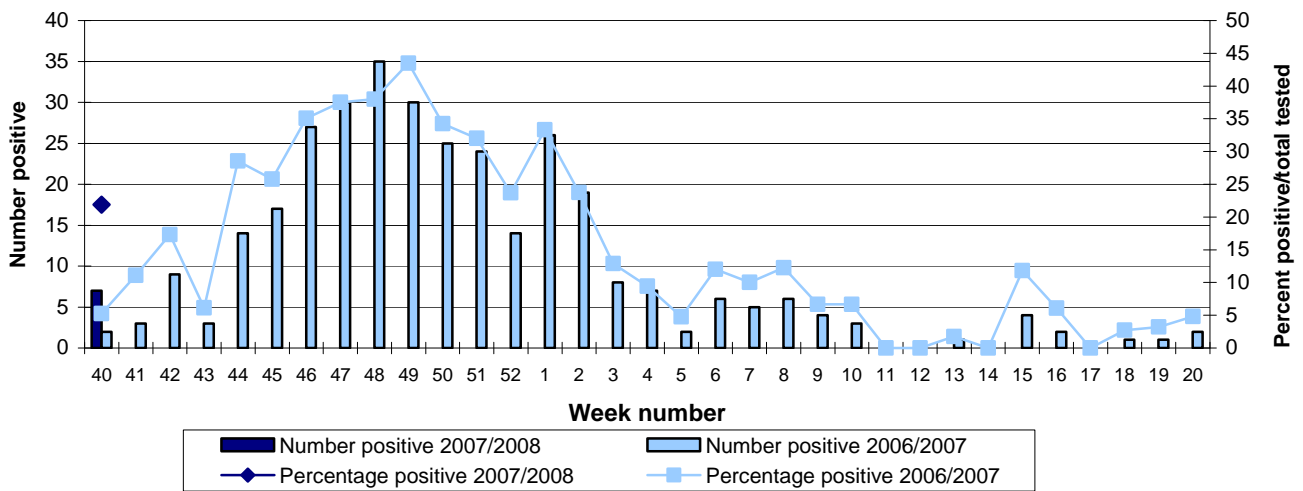


Figure 4. Number and percentage of non-sentinel RSV positive specimens detected during the 2006/2007 and 2007/2008 influenza seasons

Weekly Influenza Notifications

No influenza cases were notified to HPSC during week 40 2007. Influenza cases notified to HPSC during the summer of 2007 and during the 2007/2008 influenza season are shown in figure 5 and compared to GP ILI consultation rates.

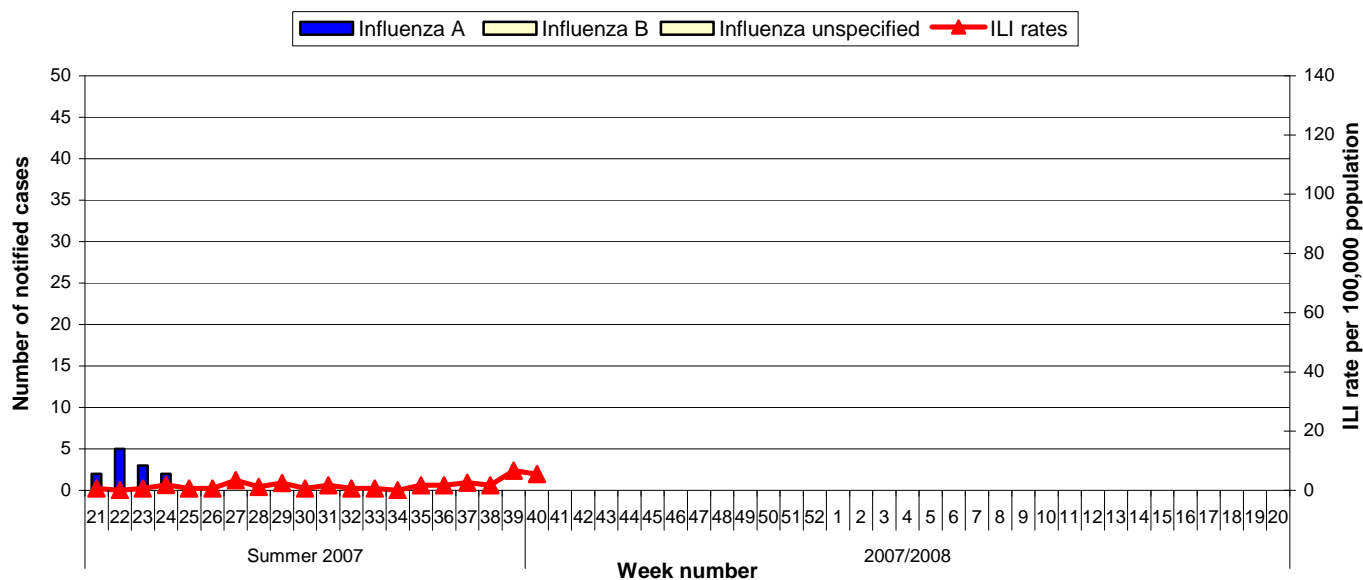


Figure 5: Number of notifications* of influenza (possible & confirmed) by type and by week of notification compared to sentinel GP ILI consultation rates per 100,000 population during the summer of 2007 and the 2007/2008 influenza season
 *Notification data are provisional and were extracted from [CIDR](#) on the 11/10/2007 at 09.41

Mortality Data

No influenza associated deaths were registered with the GRO during the summer of 2007 or during week 40 2007.

Outbreak Reports

No ILI/influenza outbreaks were reported to HPSC during the summer of 2007 or during week 40 2007.

Regional Influenza Activity by HSE-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 ILI/influenza 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. A map of influenza activity by HSE-Area will be produced each week in this report. Reporting of influenza activity by HSE-Area will begin next week.

Influenza Activity in Northern Ireland

During week 40 2007, one case of clinical influenza and 26 ILI cases were reported in Northern Ireland, corresponding to a combined rate of 18.72 per 100,000 population, an increase from the rate of 5.96 per 100,000 for week 39 2007. Ten non-sentinel swabs were tested during week 40 2007, none of which were positive for influenza virus. One non-sentinel specimen was positive for RSV. <http://www.cdscni.org.uk>

Influenza Activity in England, Scotland & Wales

Influenza activity remains low across the United Kingdom. Clinical indicators of influenza activity have remained stable in England, Scotland and Wales. Detections of influenza A and B from NHS and HPA laboratories are also at low levels, as expected for this time of year. Laboratory confirmed infections of RSV are increasing and are at higher levels than those recorded last season (2006/2007), possibly indicating an early start to RSV activity. Influenza has not been detected in any specimens sent to the Respiratory Virus Unit at the Centre for Infections during week 40 2007.

http://www.hpa.org.uk/infections/topics%5Faz/influenza/seasonal/activity0708/weekly_summary.htm

Influenza Activity in Europe

During weeks 38 and 39 2007, low levels of influenza activity were reported throughout Europe. During week 38 2007, two influenza B detections (one in Estonia and one in Sweden) and a single detection of influenza A (H3) from Belgium were reported. There have been no reports of unusual influenza activity in Europe since week 22

2007, when an outbreak of avian influenza A (H7N2) with transmission to humans was reported in the United Kingdom. <http://www.eurosurveillance.org/ew/2007/070531.asp#2>. The first surveillance report of influenza activity in Europe for the 2007/2008 season will be published by the European Influenza Surveillance Scheme (EISS) on the 19th of October 2007. <http://www.eiss.org/index.cgi>

Influenza Activity in Canada

During weeks 37 and 38 2007, influenza activity remained low in Canada. The ILI consultation rate for week 39 2007 was 8 per 1,000 patient visits (unchanged from week 38 2007). In weeks 37 and 38 2007, only one of the 737 (0.1%) specimens tested were positive for influenza A virus. No new outbreaks were reported for weeks 37 and 38 2007. <http://www.phac-aspc.gc.ca/fluwatch/index.html>

Influenza Activity in the United States

Surveillance reporting of influenza in the United States resumes on the 12th of October 2007. <http://www.cdc.gov/flu/weekly/fluactivity.htm>

Influenza Activity Worldwide

During week 39 2007, localised influenza activity was reported in New Zealand (1 A unsubtype & 5 B) and sporadic activity was reported in Argentina (1 A untyped), China (4 A H1, 11 A H3 & 19 B) and Sri Lanka (1 A untyped). One influenza A (H1) virus was detected in Iran and no influenza activity was reported in Mongolia during week 39 2007. <http://gamapserver.who.int/GlobalAtlas/home.asp>

Avian Influenza

As of the 8th of October 2007, 330 confirmed human cases and 202 (61.2%) deaths from avian influenza A (H5N1) have been reported to the WHO from Azerbaijan, Cambodia, China, Djibouti, Egypt, Indonesia, Iraq, Lao Peoples Democratic Republic, Nigeria, Thailand, Turkey and Viet Nam.

The Ministry of Health of Indonesia has announced a new human case of avian influenza A (H5N1). A 44-year-old female from Riau Province developed symptoms on the 1st of October and died on the 6th of October 2007. Of the 108 cases confirmed to date in Indonesia, 87 have been fatal.

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 2007/2008 Season

The members of the WHO Collaborating Centres on Influenza have recommended that influenza vaccines for the 2007/2008 influenza season in the Northern Hemisphere contain the following strains:

- an A/Solomon Islands/3/2006 (H1N1)-like virus
- an A/Wisconsin/67/2005 (H3N2)-like virus^a
- a B/Malaysia/2506/2004-like virus

Candidate vaccine viruses include:

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

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

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

Acknowledgements

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This report was produced by Dr Lisa Domegan and Dr. Joan O'Donnell, HPSC